SAMSUNG

64CH Network Manager

Standard/Professional

Network Management Software SNM-64S/64P User's Manual

Thank you for purchasing a Samsung Network Management Software.
Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

ENGLISH

A brand that is integrated into Samsung's network products, iPOLiS stands for a convenient world (Polis) made safe (Polis) through Samsung's superior network performance (Internet protocol). With iPOLiS products, clear digital images transmitted over the internet, real-time monitoring is possible anywhere with an internet connection. Easy remote control functions and the use of existing networks minimize installation costs. With iPOLiS, experience a world of convenience connected anytime, anywhere.

Preface

The user who installs and operates the product should be aware of this manual and other manuals referred to by this manual before installation and operation for proper use.

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Supported Products	Network Camera: SNC-550, SNP-3300/1000 Video Server: SNS-100/400 DVR: SVR-1630, SVR-1650/1640/950, SVR-940/450 Network Recorder: SNR-32A/16A/9A

Version 1.6 (2308. rev. 1)

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Chapter1. Network Manager Standard/Professional Overview

1.1. Introduction

The SNM-64S/P (Network Manager Standard/Professional) is a central surveillance system solution that monitors multiple sites with video, audio and alarm signals from DVR, IP video server, and network camera over networks.

The software supports different windows of live viewer, recording data player, interactive map viewer, and alarm signal monitoring panes.

1.2. Features

The SNM-64S/P does not limit the number of units to register and monitor. The program displays up to 128 live videos; up to 64 channels on one screen and 64 channels on another screen. The program supports as many monitors as a PC supports. User may open windows or panes of live video displaying, data playing, alarm signal monitoring, event signal monitoring, map displaying, etc. User can compose the central management system by choosing required widows or panes.

The SNM-64P does not limit the number of user of different rights. Administrator may assign rights to each user in detail by unit or by feature. (**SNM-64P**)

The program displays event/alarm signals in real-time by receiving from devices over the network. With alarm signals, administrator may configure the SNM-64P for automated response to the alarms with various actions. (**SNM-64P**)

On the program, user may control PTZ cameras and relay outputs on the server or DVR. By attaching microphone and speaker system to devices on site, user may make bi-directional audio communication over the network.

The main player window provides user with various ways of searching data on DVR. User may back up data from DVR to PC over the network and can convert the proprietary video format into AVI format in the player software. With a single-channel instant player window, user can pull the latest recorded data from DVR with a click to play the video instantly.

The map supports multi-layer structure, so that each map on different layers can respond interactively. On the map, user may lay out icons of each device. Event/alarm signal triggers the icons on the map to blink, so that user may monitor event/alarm signals on the map. With the event/alarm signal, user may open a live or recorded video window instantly over the map.

Chapter2. Installation

2.1. System requirements

Network Manager software may not run properly if the PC does not meet minimum requirements. Other programs should not run on the same PC where SNM-64S/P is running. Otherwise, SNM-64S/P may not perform as designed.

	Minimum	Recommended
CPU	Intel Pentium 4 / 3.0GHz	Core2duo E4300 or higher
Main Memory	1GB	2GB or higher
Video Memory	128MB	512MB or higher
Display Resolution	1024 x 768 (with 32bit color) or higher	
HDD Storage Space	80GB or higher	
Operating System	Windows 2000 SP4 / Windows XP Professional	
Others	DirectX 9.0 or higher	

Caution SNM-64S/P is not compatible with Windows Vista.

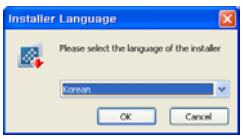
2.2. Supported devices

For the compatible devices in the SNM-64S/P, please refer to below table.

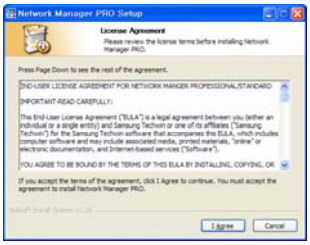
Type	Model	Firmware Version	Remark
Network Camera	SNC-550	2.8 or later	
Network Camera	SNP-3300	2.8 or later	
Network Camera	SNP-1000	2.8 or later	
Video Server	SNS-100	2.8 or later	
Video Server	SNS-400	2.8 or later	
DVR	SVR-1630	4.8.0 or later	
DVR	SVR-1650	2.8 or later	
DVR	SVR-1640	2.8 or later	
DVR	SVR-950	2.8 or later	
DVR	SVR-940	1.0.0 or later	
DVR	SVR-450	1.0.0 or later	
Network Recorder	SNR-32A	1.0.2 or later	
Network Recorder	SNR-16A	1.0.2 or later	
Network Recorder	SNR-9A	1.0.2 or later	

2.3. Software installation

1. Insert the provided CD in a PC.
2. Click on the ‘SNM-64S/P Setup_Vxxx.exe’ file in the CD.
3. Select a language to use.



4. Click the ‘I Agree’ button in ‘License Agreement’ page. Otherwise, the installation is cancelled.



5. Enter the provided serial number and license key in ‘Licensing’ page. (SNM-64P)

6. Click the ‘Install’ button. The Default directory is ‘C:\Program Files\Samsung Techwin\SNM-64S/P’. To install the software in a different directory, click the ‘Browse’ button and choose a different directory.

Caution If the PC has a previously installed SNM-64S/P, the installer asks whether to overwrite the existing DB or not. The DB contains setting values on the program. If desired to maintain the existing values, click ‘No’ button.

USB dongle key driver installation (SNM-64P)

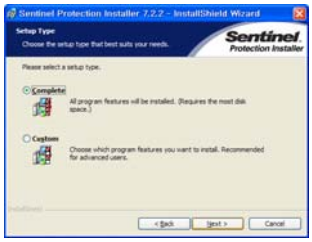
1. Insert the provided CD in a PC.

2. Click on the ‘Sentinel Protection Installer x.x.x.EXE’ file in the ‘USB Dongle Key Driver’ folder on the CD.

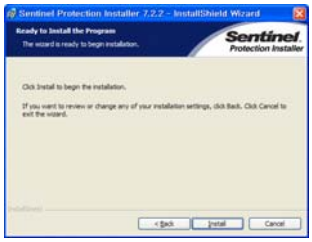
3. Click ‘Next’ to continue in the initial window.

4. Click the ‘I Accept the terms in the license agreement.’ and ‘Next’ button in turn in ‘License Agreement’ page; otherwise, the installation is cancelled.

5. Select ‘Complete’ option and ‘Next’ buttons in turn in ‘Setup Type’ page.



6. Click ‘Install’ button in ‘Ready to Install Program’ page.



7. Click ‘No’ button when asked whether to install ‘Sentinel Protection Server’ on the PC.

8. Click ‘Finish’ button when the installation is completed.

Caution

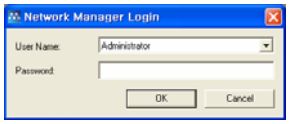
Once the SNM-64P is installed, plug the provided USB dongle key to PC before running the software. (**SNM-64P**)

Chapter3. Login

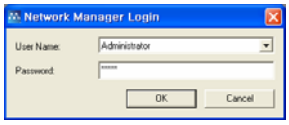
Login process

1. Open the SNM-64S/P. User may open it by selecting the execution file through ‘Start’ menu [Start] – [Samsung Techwin] – [SNM-64S/P] or by double-clicking the execution icon on the background.

2. Select a user ID in the ‘Login’ window. User may see the entire list of IDs that are registered into the program by clicking on the combo button to the right. Initially, only the Administrator is registered as default.



3. Enter the corresponding password to the selected ID. The default password of the ‘Administrator’ ID is ‘12345’. Administrator may change the password in the program.



Note	User may change the password in [Setup] – [Change Password] menu. For the detailed information, please refer to the ‘5.2.9 Change Password’ page. The SNM-64P supports multiple users with different rights, and all of the entire users can configure the monitoring conditions differently based on their privileges on a single PC. (**SNM-64P**) The SNM-64S/P archives settings and layouts on the program by the current user when the program is closed.

Chapter4. For Beginner

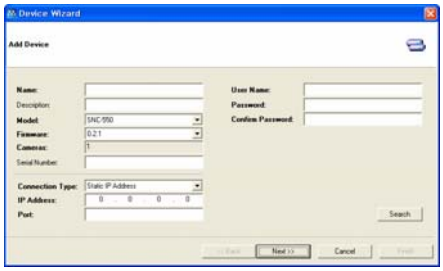
4.1. Registering a device through ‘Wizard’ menu

Administrator may register digital video device(s) (DVR, IP video server, and network camera) in the program by going through the entire process step by step in the ‘Wizard’ menu.

The ‘Wizard’ menu includes both the device registration and site configuration steps. Once the entire process is done, a device appears in a site tree on the program.

4.1.1. Registration process

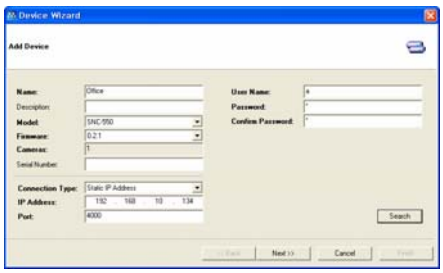
1. Select [Setup] – [Wizard] – [Device] menu.



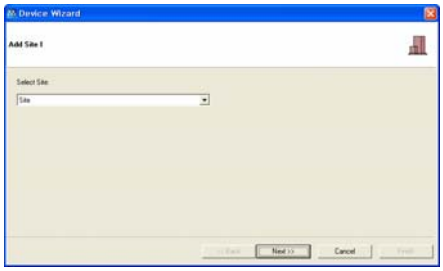
2. Enter values and click ‘Next button. The items in bold such as device name, model name, firmware version, connection type, IP address, port number, user ID and password are mandatory information to enter.

Item	Description
Name	Name the device to display in this program
Model	Select a model name of the device to register
Firmware	Select a proper firmware version of the device
Cameras	Program displays the number of supporting channels of the device
Connection Type	Select the connection type to device over network (a)Static IP Address, (b)Dynamic IP Address-MAC, (c) Dynamic IP Address-DDNS, (d)Domain Name
IP Address/ Domain Name	Enter IP address or domain name of the device (a)Static IP Address: Enter IP address (b)Dynamic IP Address-MAC: Enter MAC address of ‘MAC address’ item (c)Dynamic IP Address-DDNS: Enter Server address of ‘Server address’ item and User ID of ‘User ID’. (d)Domain Name: Enter domain name
Port	Enter the port number of the device
User ID	Enter user ID which is used to access the device over network
Password	Enter password that goes with the user ID
Confirm Password	Re-enter the password to confirm

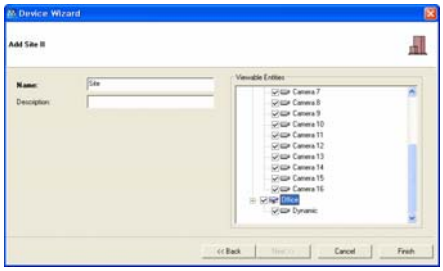
3. Select a site to register the device and click ‘Next’ button.


Device Wizard
Add Device
Name:
Office
Description:
Model:
SNC-550
Firmware:
0.2.1
Cameras:
1
Serial Number:
Connection Type:
Static IP Address
IP Address:
192 168 10 134
Port:
4000
User Name:
Password:
Confirm Password:
Search
Next >>
Cancel

4. Click on the combo button to the right to see the entire list of sites. Administrator may add more sites through ‘Site Manager’ menu. Initially, the program shows a site named as ‘Site’ as default.



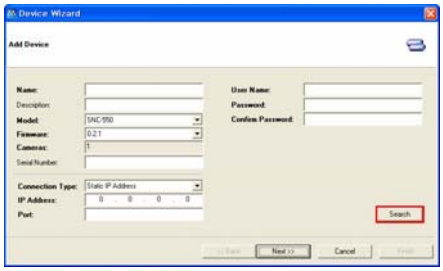
5. Click the unit to register the unit under the selected site and click ‘Finish’ button. User may register by unit or by each channel.



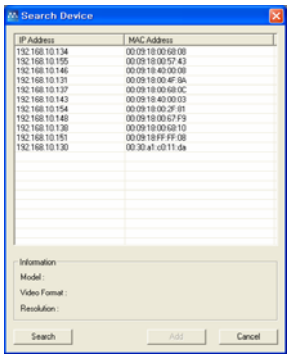
6. The registered unit appears in the site tree under the selected site.

4.1.2. Utilizing ‘Device Search’ feature

1. Select [Setup] – [Wizard] – [Device] menu.

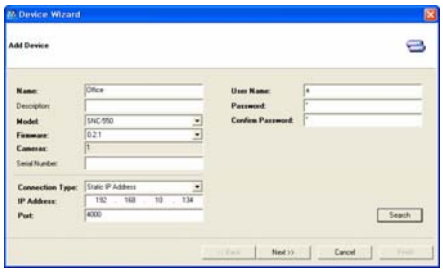


2. Click ‘Search’ button on the ‘Device Wizard’ window. Then ‘Device Search’ window opens and displays the list of the entire devices (Network Camera, Video Server, and DVR) on the LAN.



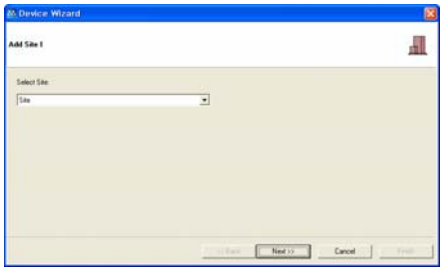
3. Select a desired device in the list and click ‘Add’ button. Then the selected device’s network information is displayed on the ‘Device Wizard’ window automatically.

4. Name the device and enter user ID and password to the selected device.



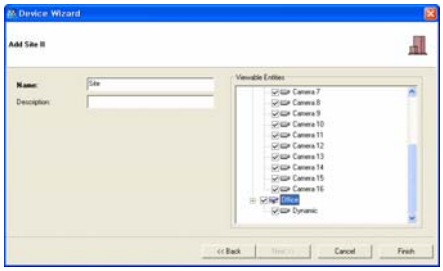
5. Click ‘Next’ button.

6. Click on the combo button to the right to see the entire list of sites. Administrator may add more sites through ‘Site Manager’ menu. Initially, the program shows a site named as ‘Site’ as default.



7. Click ‘Next’ button.

8. Click the unit to register the unit under the selected site and click ‘Finish’ button. User may register by unit or by each channel.



9. The registered unit appears in the site tree under the selected site.

Note	To refresh and update the device list in ‘Device Search’ window, click Search button again.

Caution	‘Search Device’ feature does run on a single application at the same time. If you run ‘Search Device’ menu on different applications, it performs in an application properly.

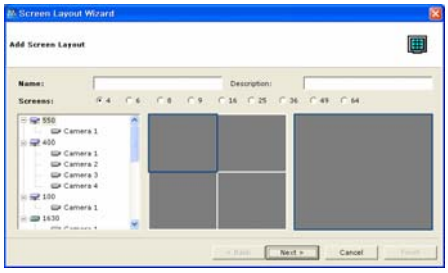
4.2. Registering a screen-layout through ‘Wizard’ menu

Administrator may register customized screen-layout(s) in the program by going through the entire process step by step in the ‘Wizard’ menu.

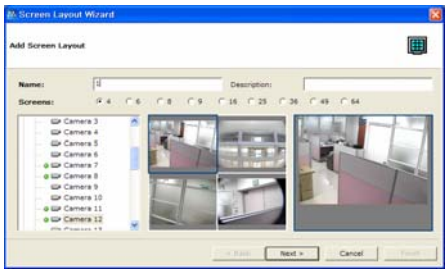
The ‘Wizard’ menu includes both the screen-layout composition and site configuration steps. Once the entire process is done, a screen layout appears in a site tree on the program.

Registration process

1. Select [Setup] – [Wizard] – [Screen Layout] menu.

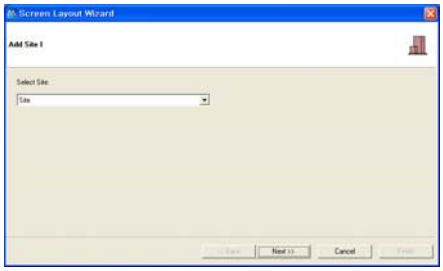


2. Enter the name of the layout, choose the split mode, select screen and click camera icons to connect. Administrator may drag and drop cameras to the split-screen. To the right of the split-screen, there is a single screen that enlarges video from a selected camera. The items in bold are mandatory information to enter.



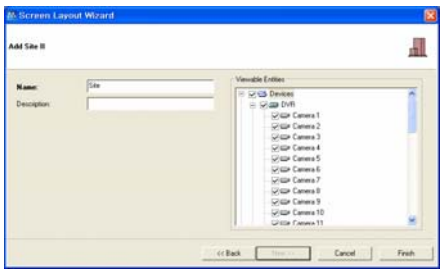
3. Click ‘Next’ button.

4. Click on the combo button to the right to see the entire sites. Administrator may add more sites through ‘Site Manager’ menu. For the first time, the program shows a site named as ‘Site’ as default.



5. Click ‘Next’ button.

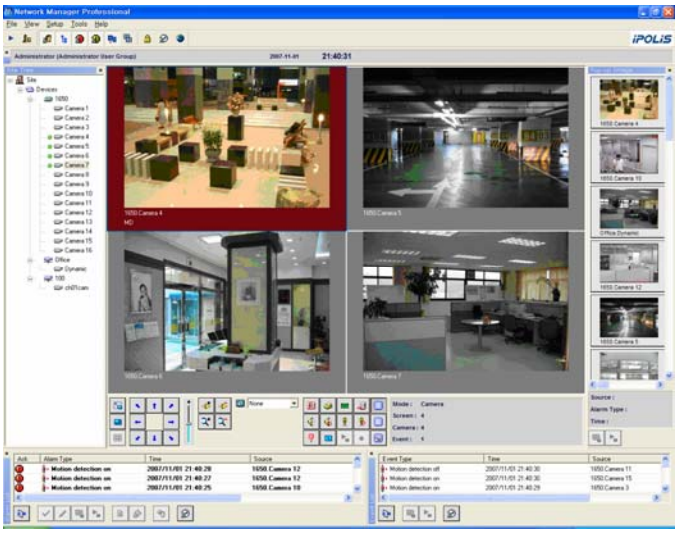
6. Click the composed layout to register the unit under the selected site and click ‘Finish’ button.



7. The registered layout appears in the site tree under the selected site.

4.3. View video easily

After registering devices and screen layouts through Wizard menu, user may monitor live video by clicking on the icons of device or screen layout in the site tree.



4.3.1. Viewing video by camera

1. Click the camera icon or name of a desired channel in the site tree.

2. The clicked channel connects to device and displays live video on the screen. The connected channel is marked with a green dot on the front of the camera icon.

3. Click again on the camera icon or name to disconnect the channel.

Note The default mode is quad-split screen, and you may refer to 'Screen Splitting' chapter to choose other options.

4.3.2. Viewing video by screen layout

1. Click the icon or the name of a desired screen layout in the site tree.

2. The program composes the screen layout as configured and connects the entire channels of the layout. The connected layout marks with a green dot on the front of the layout icon.

3. Click again on the layout icon or name to disconnect.

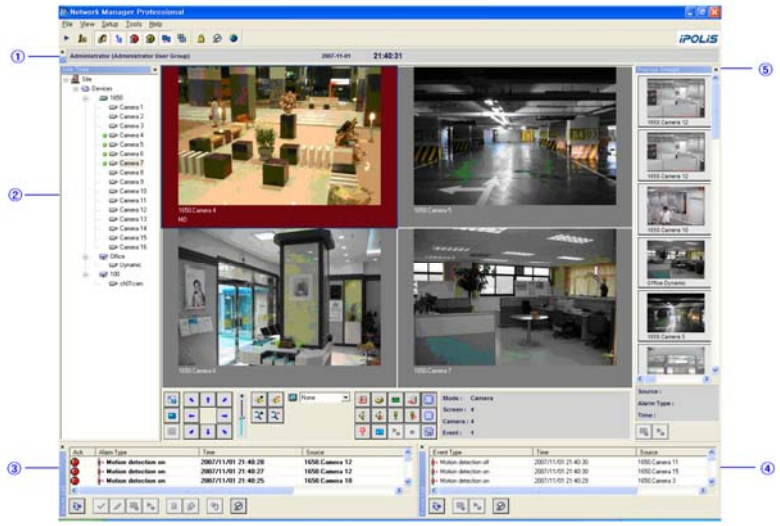
Note When user clicks on a screen layout to monitor video, the main screen is split into the defined number by the registered screen layout automatically.

Chapter5. Menu

5.1. View

With sub-menus in the ‘View’ menu, user may open or close corresponding windows or panes.

No.	Menu	Icon	Feature	Remark
①	Login Display		Login status information displaying pane	
②	Site Tree		Site tree displaying pane	
③	Alarm List		Alarm list displaying pane	SNM-64P
④	Event List		Event list displaying pane	
⑤	Pop-up Image		Thumbnail image displaying pane	SNM-64P
	Second Screen		Second viewer window	

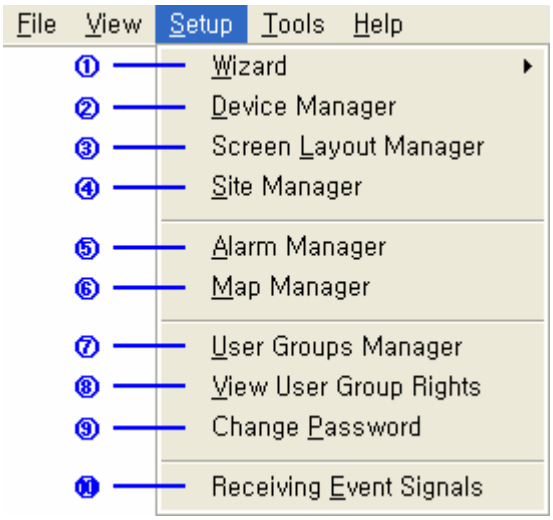


5.2. Setup

Administrator should configure the program in ‘Setup’ menu to run the program properly. The ‘Setup’ menu provides sub-menus as below table. Some of the menus are allowed for only the users who have administrator’s rights.

No.	Menu	Feature	Rights	Remark
①	Wizard	Add, edit, delete device	Admin	
②	Device Manager	Add, edit, delete device	Admin	
③	Screen Layout Manager	Add, edit, delete screen layout	User	
④	Site Manager	Compose site tree	User	
⑤	Alarm Manager	Configure alarm signal and program the response	User	SNM-64P
⑥	Map Manager	Register maps and layout the device	User	SNM-64S:

		over the map		1 Group, 1 Layers
⑦	User Group Manager	Add, edit, delete user group and user ID	Admin	SNM-64S: 2 Users
⑧	View User Group Rights	View assigned rights and devices to the user group	User	
⑨	Change Password	Change the user password	User	
⑩	Event Reception	Change event signal reception method	User	



Note

SNM-64P supports multiple user groups in a copy (PC). Each group has different rights and registers unlimited users (ID). Each user may configure its own settings on the program. (**SNM-64P**)

SNM-64S supports 2 Users (including Administrator).

Caution

During the configuration process, SNM-64S/P does disconnect from the listed device and does not receive alarm/event signals from the devices. Therefore it is recommended to configure the software properly prior to the main operation.

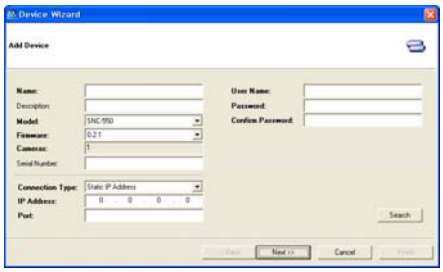
5.2.1. Wizard

Administrator may register digital video device(s) (DVR, IP video server, and network camera) in the program by going through the entire process step by step in the ‘Wizard’ menu.

The ‘Wizard’ menu includes both the device registration and site configuration steps. Once the entire process is done, a device appears in a site tree on the program.

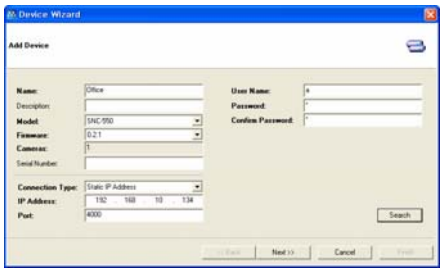
Registration process

1. Select [Setup] – [Wizard] – [Device] menu.

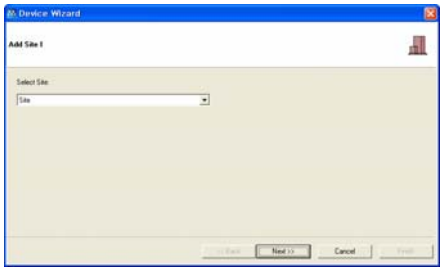


2. Enter values and click ‘Next button. The items in bold such as device name, model name, firmware version, connection type, IP address, port number, user ID and password are mandatory information to enter.

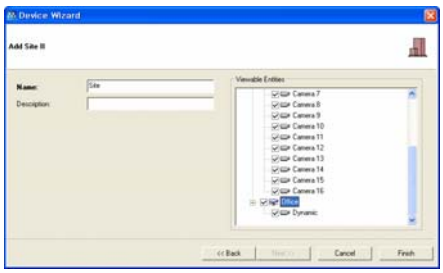
3. Select a site to register the device and click ‘Next’ button.



4. Click on the combo button to the right to see the entire list of sites. Administrator may add more sites through ‘Site Manager’ menu. Initially, the program shows a site named as ‘Site’ as default.



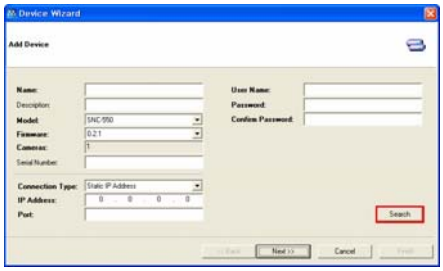
5. Click the unit to register the unit under the selected site and click ‘Finish’ button. User may register by unit or by each channel.



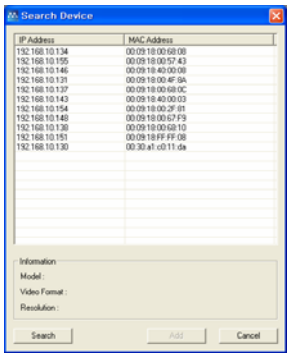
6. The registered unit appears in the site tree under the selected site.

Registration process with using ‘Device Search’ feature

1. Select [Setup] – [Wizard] – [Device] menu.

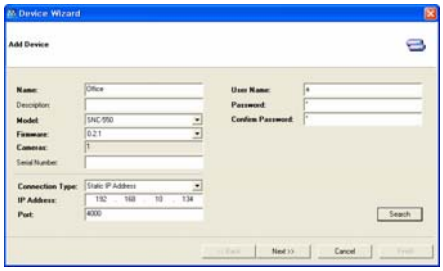


2. Click ‘Search’ button on the ‘Device Wizard’ window. Then ‘Device Search’ window opens and displays the list of the entire devices (Network Camera, Video Server, and DVR) on the LAN.



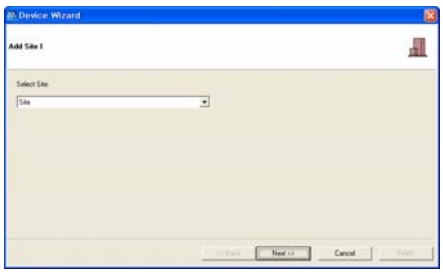
3. Select a desired device in the list and click ‘Add’ button. Then the selected device’s network information is displayed on the ‘Device Wizard’ window automatically.

4. Name the device and enter user ID and password to the selected device.



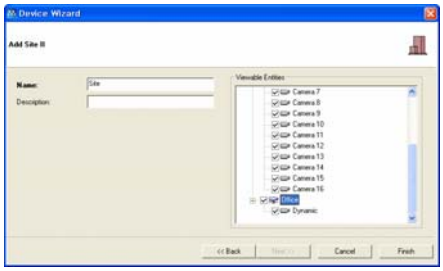
5. Click ‘Next’ button.

6. Click on the combo button to the right to see the entire list of sites. Administrator may add more sites through ‘Site Manager’ menu. Initially, the program shows a site named as ‘Site’ as default.



7. Click ‘Next’ button.

8. Click the unit to register the unit under the selected site and click ‘Finish’ button. User may register by unit or by each channel.



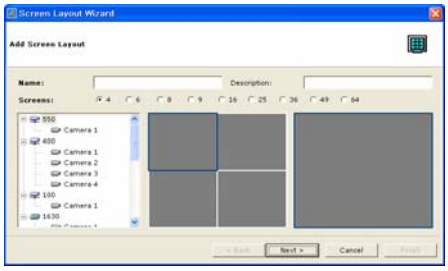
9. The registered unit appears in the site tree under the selected site.

Note	To refresh and update the device list in ‘Device Search’ window, click Search button again.

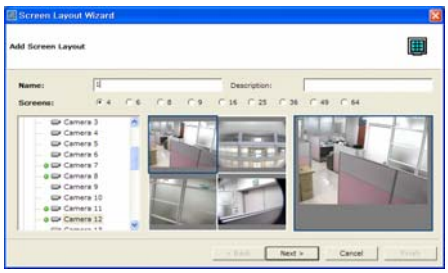
Caution	‘ Search Device’ feature does run on a single application at the same time. If you run ‘Search Device’ menu on different applications, it performs in an application properly.

Registering screen-layout

1. Select [Setup] – [Wizard] – [Screen Layout] menu.

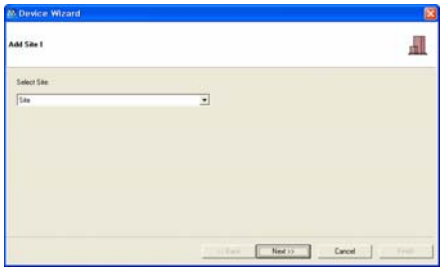


2. Enter the name of the layout, choose the split mode, select screen and click camera icons to connect. Administrator may drag and drop cameras to the split-screen. To the right of the split-screen, there is a single screen that enlarges video from a selected camera. The items in bold are mandatory information to enter.



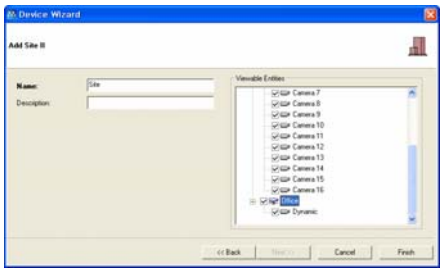
3. Click ‘Next’ button.

4. Click on the combo button to the right to see the entire sites. Administrator may add more sites through ‘Site Manager’ menu. For the first time, the program shows a site named as ‘Site’ as default.



5. Click ‘Next’ button.

6. Click the composed layout to register the unit under the selected site and click ‘Finish’ button.



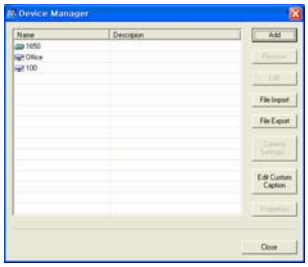
7. The registered layout appears in the site tree under the selected site.

5.2.2. Device Manager

Administrator may add, edit or delete a digital video device (DVR, IP video server, and network camera) with ‘Device Manager’ menu. Administrator should register a digital video device, so that user can utilize the device in viewing live video with ‘Viewer’ window or playing recorded data in ‘Player’ window.

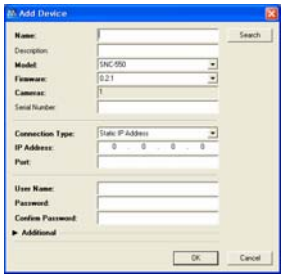
Registration process

1. Select [Setup] – [Device Manager] menu.



2. Click ‘Add’ button to the right in the window.

3. Enter values and click ‘Ok’ button. The items in bold such as device name, model name, firmware version, connection type, IP address, port number, user ID and password are mandatory information to enter.

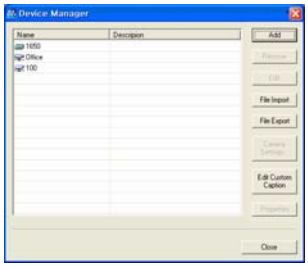


4. The registered unit appears in the list.

Note	A newly registered device does not appear on the site tree automatically. After the administrator registers a new device to the program, a user should add the device to its own site to utilize the device in monitoring video.

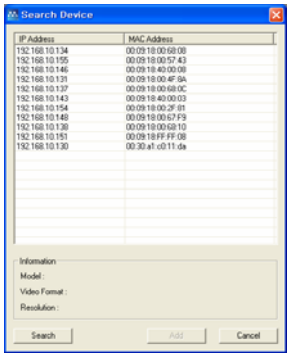
Registration process with using ‘Device Search’ feature

1. Select [Setup] – [Device Manager] menu.



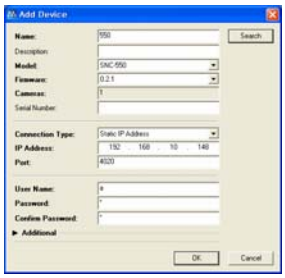
2. Click ‘Add’ button to the right in the window.

3. Click ‘Search’ button on the ‘Add Device’ window. Then ‘Device Search’ window opens and displays the list of the entire devices (Network Camera, Video Server, and DVR) on the LAN.



4. Select a desired device in the list and click ‘Add’ button. Then the selected device’s network information is displayed on the ‘Add Device’ window automatically.

5. Name the device and enter user ID and password to the selected device.



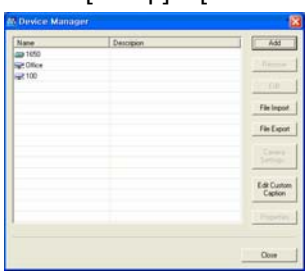
6. The registered unit appears in the list.

Note	To refresh and update the device list in ‘Device Search’ window, click Search button again.

Caution	‘Search Device’ feature does run on a single application at the same time. If you run ‘Search Device’ menu on different applications, it performs in an application properly.

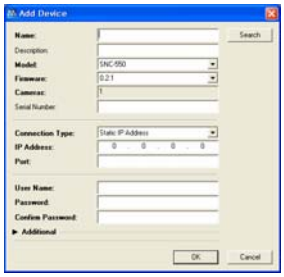
Registration process with a device of dynamic IP address

1. Select [Setup] – [Device Manager] menu.



2. Click ‘Add’ button to the right in the window.

3. Enter values and click ‘Ok’ button. The items in bold such as device name, model name, firmware version, port number, user ID and password are mandatory information to enter. Different to a device of fixed IP address, administrator should select the ‘Connection Type’ as ‘Dynamic IP Address-MAC or Dynamic IP Address-DDNS’ and enter the ‘MAC address’, ‘Port’, ‘Server address’ and ‘User ID’.

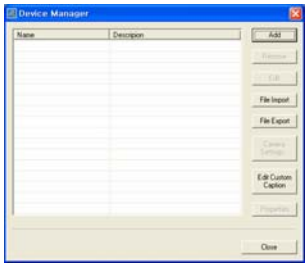


4. The registered unit appears in the list.

참고	If the ‘Dynamic IP Address-DDNS’ is selected, the default ‘Server address’ will be entered www.samsungipolis.com. The ‘User ID’ item must be entered the user ID that was registered in DDNS server.

Registration process with using ‘File Import’ feature

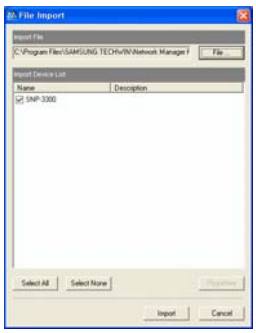
1. Select [Setup] – [Device Manager] menu.



2. Click ‘File Import’ button to the right in the window.

3. Click ‘File …’ button. File open dialog appears. Click ‘Open’ button after selecting the old DB file.

4. The unit that is stored in the old DB file appears in the import device list.

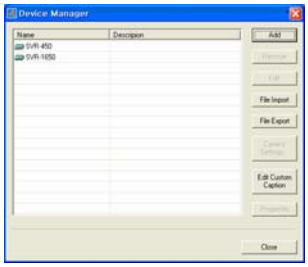


5. Click ‘Import’ button after choosing the device.

Note	The ‘File Import’ feature imports the DB file that used in ‘SNM-64S/P’ or is created by ‘File Export’ feature.

Backup process with using ‘File Export’ feature

1. Select [Setup] – [Device Manager] menu.



2. Click ‘File Export’ button to the right in the window. File export dialog appears. The registered unit appears in the export device list.

3. Click ‘File …’ button after choosing the device to export. File open dialog appears.

4. Click ‘Open’ button after entering export file path and name.

5. The export file path and name are displayed in the ‘Export File’.

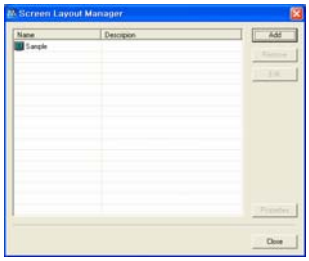
6. Click ‘Export’ button.

5.2.3. Screen Layout Manager

User may add, edit or delete a customized screen-layout(s) with ‘Screen Layout Manager’ menu. With a screen layout, user may play live video from the composed channels by clicking on the icon or name in the site tree.

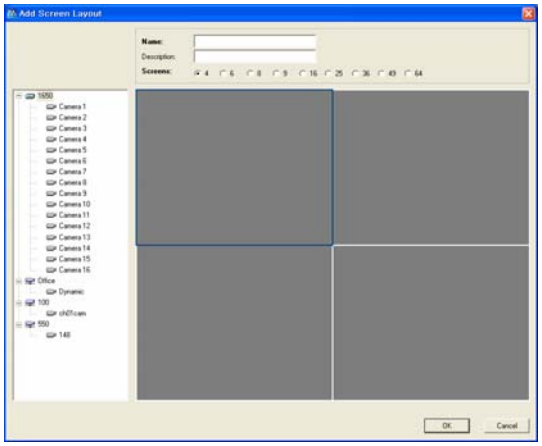
Composition process

1. Select [Setup] – [Screen Layout Manager] menu.



2. Click ‘Add’ button to the right in the window.

3. Enter the name of the layout, choose the split mode, select screen and click camera icons to connect. After composing the layout, click ‘Ok’ button.



4. The composed layout appears in the list.

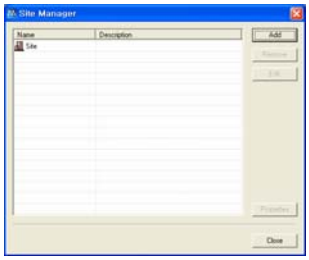
Note	A newly composed layout does not appear on the site tree automatically. After composing a new layout, a user should add the layout to its own site to utilize the layout in monitoring video. User may utilize devices that are allowed for the user to monitor. With any device that is not allowed to access, a user cannot compose a screen layout by using any channel from the unit.

5.2.4. Site Manager

User may add, edit or delete a site with 'Site Manager' menu. In the 'Site Manager' menu, user may compose its own site tree by listing devices and screen layouts. By adding multiple sites, user may manage the entire system by zone or site easily.

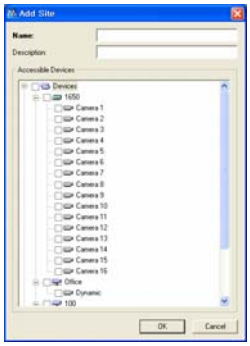
Composition process

1. Select [Setup] – [Site Manager] menu.



2. Click 'Add' button to the right in the window. A site named as 'Site' is listed as default. If you want to use the default site, select it and click 'Edit' button.

3. Enter the name of the site and compose the site tree by choosing entire device or certain channels from a device. With screen layout, user may add the layout as it was configured in the 'Screen Layout Manager' menu. After composing the site, click 'OK' button.



4. The composed site appears in the list.

Note	When a site is composed with 'Site Manager' menu, the result reflects in the site tree automatically and appears devices and screen layouts on the site tree.

5.2.5. Alarm Manager (SNM-64P)

With ‘Alarm Manager’ menu, user may define a certain event signal to process closely as ‘Alarm (abnormal or specially monitored signal).

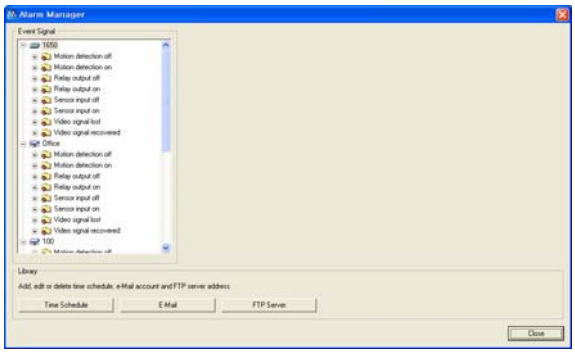
In ‘Alarm Manager’ menu, user may also schedule to process the signal and program automated reactions to the signal including popping up a thumbnail image, controlling PTZ presets, launching live or playback windows, etc.

The ‘Alarm Manager’ is composed in three panes; event signal displaying pane (left), alarm & action configuration pane (right), and library pane (bottom).

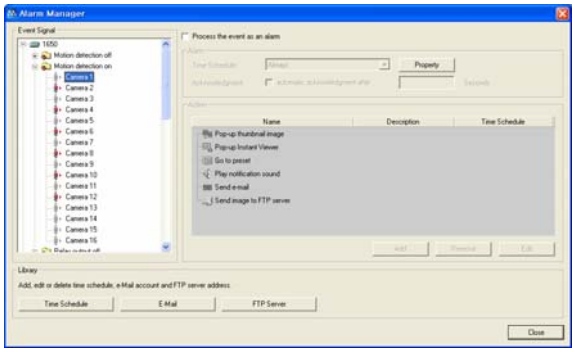
‘Alarm Manager’ feature is available only with SNM-64P.

Programming process (general)

1. Select [Setup] – [Alarm Manager] menu.



2. Select a desired event signal in ‘Event Signal’ pane to the left in the window. Once a signal is selected, the menus in ‘Alarm & Action Configuration’ pane are activated. The event signals are listed by unit in the pane, and the diversity of event signals is depending on the device’s performance.



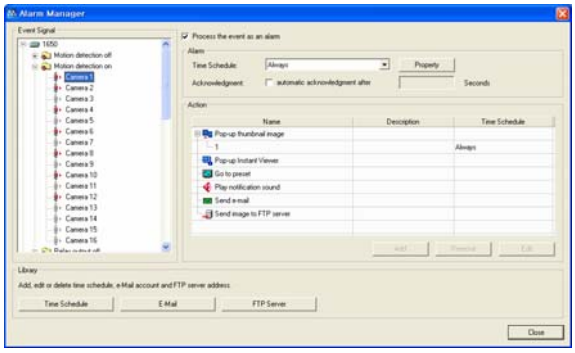
3. Put check mark on ‘Process the event as an alarm’ menu.

4. Select processing time schedule in ‘Alarm Classification’ menu. By assigning a time schedule, the SNM-64P processes the selected event signal only for the designed day and time in the selected schedule. For example, motion detection on channel 1 of device A are scheduled to process as an alarm only from 8PM to 6AM throughout a week, the motion detection signal is not processed during day time. For time schedule, administrator may create as many schedules as required in [Library] – [Time Schedule] menu to the bottom on the window. Each schedule can be configured by 30 minutes’ increment per day in a week

5. Select acknowledgement type in ‘Alarm Classification’ menu. Without putting check mark on

'automatic acknowledgement after (some) seconds' menu, the program maintains the alarm as unchecked status until a user check the signal manually.

6. Select action(s) to react against the alarm automatically. (For the detailed setting process for actions, please refer to following instructions.)



Note The programmed actions practice only when the defined the time schedule. Select 'Always' time schedule if the action should practice all the time.

5.2.5.1. **Action programming – [Pop-up a thumbnail image]**

1. Select 'Pop-up a thumbnail image' action in the list.
2. Click 'Add' button.
3. Name the action, select a time schedule to perform, and select a device and a channel from which to capture image.
4. After configuring the action, click 'OK' button.

5.2.5.2. **Action programming – [Pop-up an Instant Viewer]**

1. Select 'Pop-up an Instant Viewer' action in the list.
2. Click 'Add' button.
3. Name the action, select a time schedule to perform, and select a device and a channel from which to play live video.
4. After configuring the action, click 'OK' button.

5.2.5.3. **Action Programming – [Pop-up an Instant Player]**

1. Select 'Pop-up an Instant Player' action in the list.
2. Click 'Add' button.

3. Name the action, select a time schedule to perform, and select a device (DVR) and a channel from which to play recorded video. As default, 'Instant Player' window pulls 30 seconds' video prior to the alarm occurring time and 1 minute's video after the alarm occurring time. User may change the settings in [Tools] – [Options] menu.

4. After configuring the action, click 'OK' button.

Caution	Instant playback feature is for DVR/Network Recorder only, and it is not compatible with network camera or video server. 'Instant Player' menu is not activated when user select event/alarm log in the even/alarm list pane.

5.2.5.4. **Action programming – [Go to preset]**

1. Select 'Go to preset' action in the list.

2. Click 'Add' button.

3. Name the action, select a time schedule to perform, select a device and a channel to which a PTZ device is attached, and a preset position number to move.

4. After configuring the action, click 'OK' button.

5.2.5.5. **Action programming – [Play a notification sound]**

1. Select 'Play a notification sound' action in the list

2. Click 'Add' button.

3. Name the action, select a time schedule to perform, select a sound file, and set dwell time. The sound file can be either special sound or a voice message file.

4. After configuring the action, click 'OK' button.

5.2.5.6. **Action programming – [Send an e-Mail]**

1. Select 'Send an e-Mail' action in the list. Without listing an e-mail account in the program, an error message appears telling the status. To perform this action, user should register at least an e-mail account to the program in [Library] – [e-Mail] menu to the bottom in 'Alarm Manager' window.

2. Click 'Add' button.

3. Name the action, select a time schedule to perform, select an e-mail recipient address, select a message, and decide whether to attach image file or not. To attach an image file, user should select a device and a channel from which the program can capture an image.

4. After configuring the action, click 'OK' button.

5.2.5.7. **Action programming – [Send an image to FTP server]**

1. Select ‘Send an image to FTP server’ action in the list. Without listing an FTP server in the program, an error message appears indicating the status. To perform this action, user should register at least a FTP server to the program in [Library] – [FTP] menu on the bottom in ‘Alarm Manager’ window.

2. Click ‘Add’ button.

3. Name the action, select a time schedule to perform, select a FTP server, and a device and a channel from which the program can capture an image.

4. After configuring the action, click ‘OK’ button.

5.2.5.8. **Library configuring – [Time Schedule]**

1. Click ‘Time Schedule’ button in ‘Library’ menu.

2. Click ‘Add’ button in ‘Time Schedule’ window.

3. Name the schedule, and select day and hour in a week. Click once on a square to select a time unit and click once again to release the unit. A square is a time unit of 30 minutes.

4. Click ‘OK’ button.

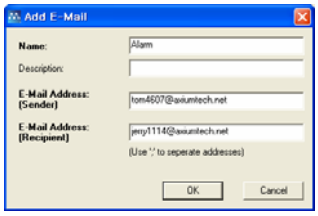
5. The new schedule appears in the list.

5.2.5.9. **Library configuring – [E-Mail Account & Message]**

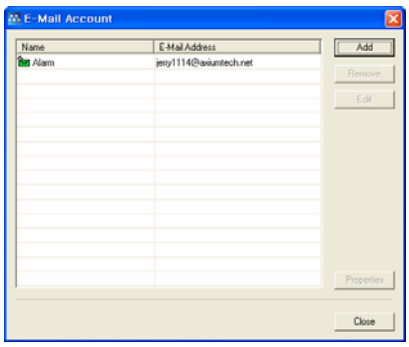
1. Click ‘E-Mail’ button in ‘Library’ menu. Select ‘E-Mail Account’ option in the pull-down menu.

2. Click ‘Add’ button in ‘E-Mail Account’ window.

3. Name the account, enter the sender’s address, and enter the recipient’s address. The recipient can be a group of e-mail accounts.



4. Click ‘OK’ button. The new e-mail account appears in the list.



5. Click ‘E-Mail’ button in ‘Library’ menu. Select ‘E-Mail Message’ option in the pull-down menu.

6. Enter Message to each event

7. If a necessary event is not listed as default value, go to ‘User defines’ tap. Enter customized message up to 10 items.

8. Click ‘OK’ button.

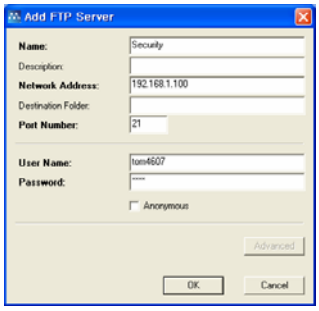
Note	When registering multiple e-Mail addresses to the software, administrator may designate a certain e-mail address as a default one as below process. Select an e-mail address in the list. Click the right button on the mouse. Select ‘Default’ option. The default e-mail address is marked with an icon to the left.

5.2.5.10. **Library configuring – [FTP]**

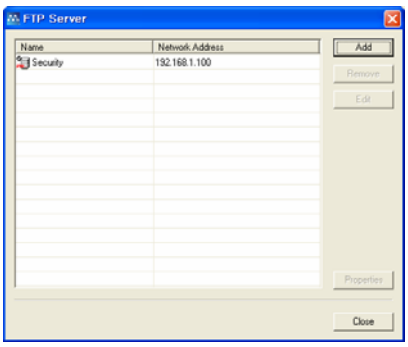
1. Click ‘FTP’ button in ‘Library’ menu.

2. Click ‘Add’ button in ‘FTP Server’ window.

3. Name the FTP server, and enter the connection information including IP address, port number, user name and password.



4. Click ‘OK’ button. The new e-mail account appears in the list.



Note

When registering multiple FTP servers to the software, administrator may designate a certain FTP server as a default one as below process. Select a FTP server in the list. Click the right button on the mouse. Select ‘Default’ option.

The default FTP server is marked with an icon to the left.

5.2.6. Map Manager

With ‘Map Manager’ menu, user may compose map by introducing BMP or JPEG image of floor plan or drawing, and by laying out device icons over the images.

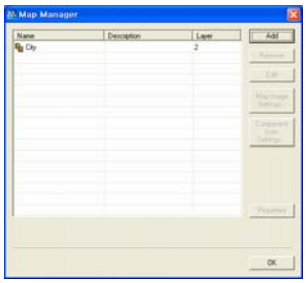
After configuring the map, user may monitor event/alarm signal and play live or record video over the map.

The configuration has three steps; map group configuration, map image composition, and component icon layout. User may utilize this feature properly after accomplishing the entire process in turn.

Note	SNM-64S supports a map group and single layer. SNM-64P supports multiple map groups.

5.2.6.1. **Map group configuration**

1. Select [Setup] – [Map Manager] menu.



2. Click ‘Add’ button to the right in ‘Map Group Manager’ window.

3. Name the group in ‘Add Map Group’ window.

4. Select the number of layers. A group is to be composed of up to 16 layers.

5. Select the top layer in the list and click ‘Layer Settings’ button to the bottom of the window.

6. Name the layer and select a layout size among 1x1, 2x2, 3x3, 4x4, 5x5, 6x6, 7x7, and 8x8 options. The number is the total number of maps that are introduced into the selected layer. With 8x8, 64 maps are introduced into the layer.

7. Click ‘OK’ button after configuring ‘Layer Settings’ window.

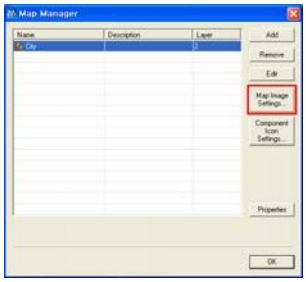
8. Repeat from steps 5 to 7 for the entire layers in the list.

Note	After configuring ‘Map Group’, it is necessary to compose map images to view map image through Map Viewer window. SNM-64P supports multiple groups while SNM-64S supports a single group. A map group supports up to 16 layers, and each layer supports up to 64 maps. A map group can have 1,024 maps in total.

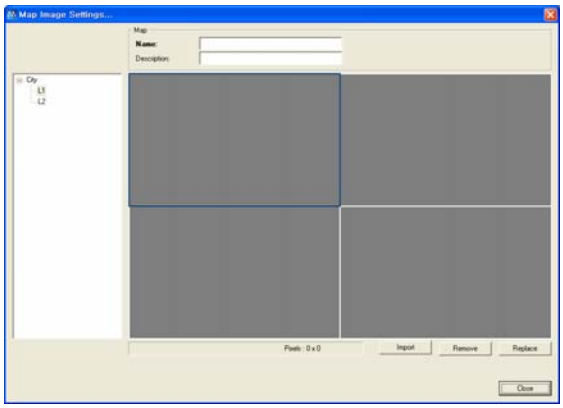
5.2.6.2. **Map image composition**

1. Select [Setup] – [Map Manager] menu.

2. Select a map group in the list. Click ‘Map Image Settings’ button to the right in ‘Map Group Manager’ window.

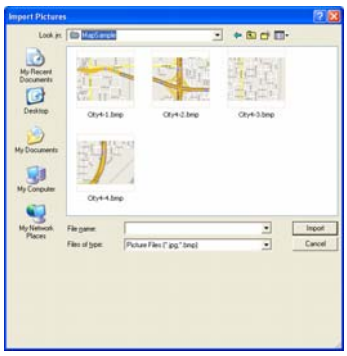


3. Select the top layer in the tree to the right of ‘Map Image Settings’ window.

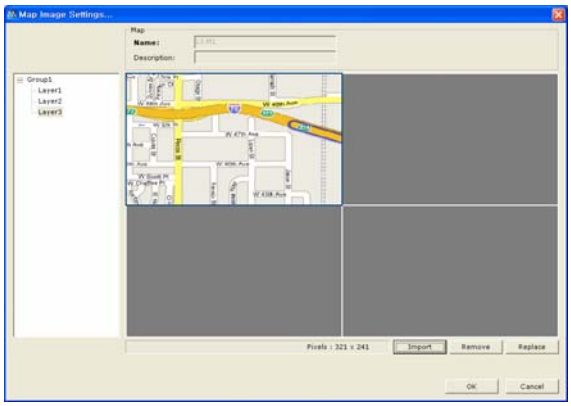


4. Select a square out of the squares in the layer. The selected square is outlined in blue.

5. Name the map image. Click ‘Import’ button to introduce a map image to the square.

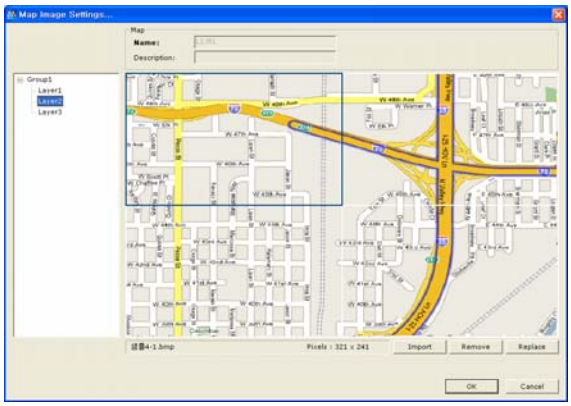


6. Repeat steps 5 to 7 to import map images in other squares of the layer.



7. Select next layer in the tree and import image images in the same manner.

8. When finished importing map images for the entire layers, click ‘OK’ button.



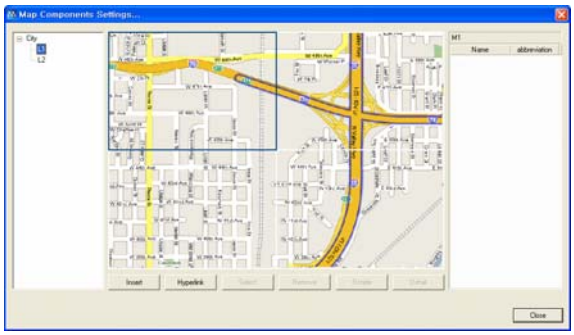
Note	After configuring ‘Map Image Settings’, it is necessary to lay out component icons over the map image to monitor event/alarm signals and launch live/recorded video player windows over the map.

5.2.6.3. **Component icon layout**

1. Select [Setup] – [Map Manager] menu.

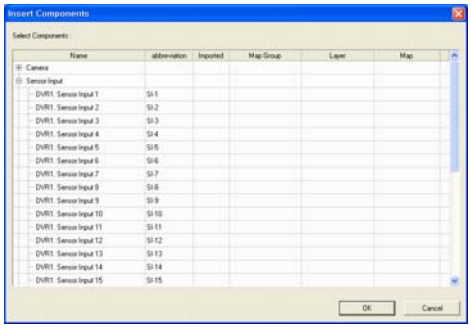
2. Select a map group in the list. Click ‘Component Icon Settings’ button to the right in ‘Map Group Manager’ window.

3. Select the top layer in the tree to the right of ‘Map Image Settings’ window. In the spitted screen, the imported map images are displayed.

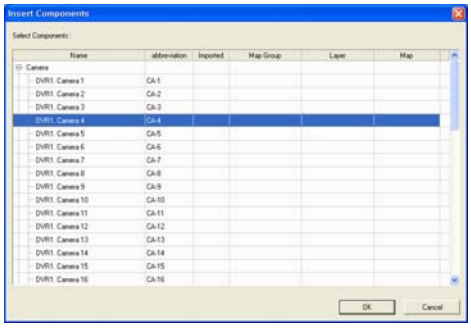


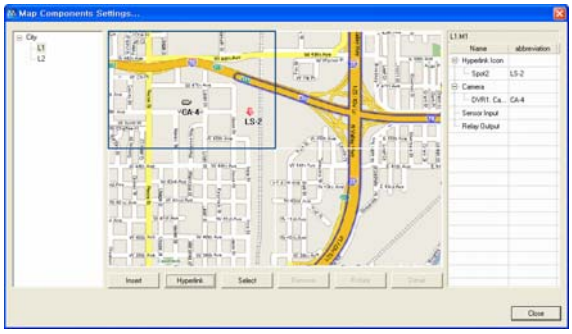
4. Create hyperlink between. Select a map image in the screen. The selected map is outlined in blue. Click ‘Hyperlink Icon’ button to create linkage between a parent map and a child map. Select a child map from the maps in the child layer list of ‘Import Hyperlink Icon’ window.

5. Inset component icon over the map. Click ‘Insert’ button to introduce a component icon over the map.



6. Select a component in the list of ‘Inset Components’ window and click ‘OK’ button. The selected components’ icon appears to the right top of the square. (A component that is used in a map is marked as ‘Imported’ and cannot be used on the other map again.)





7. Drag and drop the icon on the desired position over the map image. If the icon needs to change the direction, click ‘Select’ button and set the angle.

8. Create hyper link and inset component icons over the other maps by repeating 5 and 7 steps.

9. When finished importing map images for the entire layers, click ‘OK’ button.

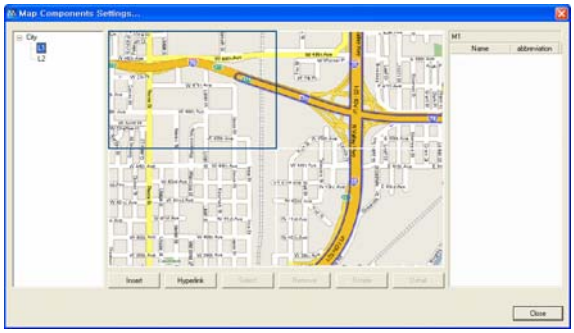
Note	When composing map group and laying out the component icons over the maps, ‘Map Viewer’ displays the result.

5.2.6.4. **Linkage creation among the maps**

1. Select [Setup] – [Map Manager] menu.

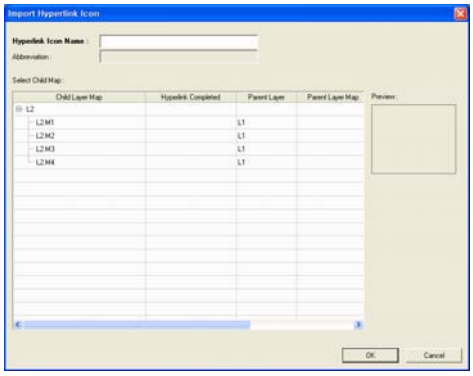
2. Select a map group in the list and click ‘Component Settings’ button to the right.

3. Select a layer in the map tree to the left. Then the selected layer displays all the registered maps in the split-screen in the middle. This is a mother-layer to which a daughter-layer shall be linked.

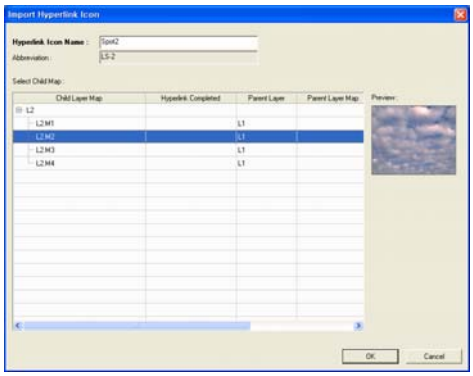


4. Select a map image among the entire maps in the split-screen. The selected map is out-lined with a square in blue.

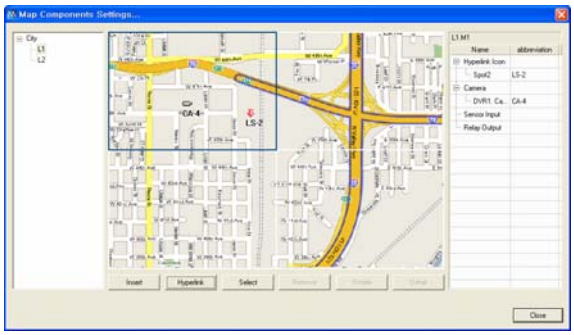
5. Click ‘Linkage’ button to the bottom. Then a new window pops up. This window displays all the registered maps in the daughter-layer.



6. Select a map that is linked to the selected map in the mother-layer. (A daughter-map cannot be linked to another mother-map again.) Click ‘Confirm’ button.



7. A linkage icon appears on the selected map image.



8. Drag and drop the linkage icon of the related position to the daughter-map. (To delete or rotate the icon, firstly click ‘Select’ button, and click the linkage icon, then click ‘Delete’ or ‘Rotate’ button.)

9. Click ‘Confirm button.

10. Add more linkage among the maps.

Note When creating linkage among the maps, ‘Map Viewer’ displays the result.

5.2.7. User Group Manager

With ‘User Groups Manager’ menu, administrator may create user groups and assigns different right to each group. Administrator may create as many users in a user group by assigning the same rights but with different ID and password.

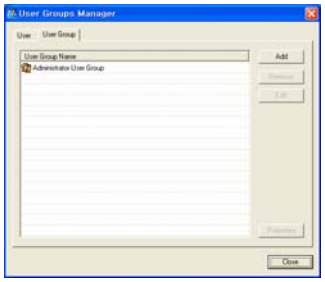
The default user group has administrator’s privilege. In the group, a administrator is listed as default. The default ID and password are ‘Administrator’ and ‘12345’.

Note	SNM-64P supports multiple groups with multiple users while SNM-64S support two user groups and users, including administrator user group and administrator.

5.2.7.1. **Adding user group**

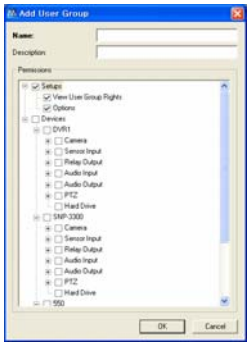
1. Select [Setup] – [User Group Manager] menu.

2. Go to ‘User Group’ tab on the top of ‘User & User Group Manager’ window.



3. Click ‘Add’ button to the right in the window.

4. Name the group and assigns right by device, by channel and by control.



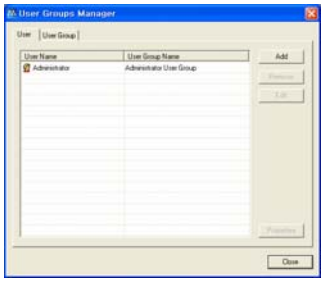
5. After configuring the group right, click ‘OK’ button.

Note	Only the user that belongs to administrator’s group can create a new group.

5.2.7.2. **Adding user ID**

1. Select [Setup] – [User Group Manager] menu.

2. Go to ‘User’ tab on the top of ‘User & User Group Manager’ window.



3. Click ‘Add’ button to the right in the window.

4. Enter user name, password, and assign the right by selecting a user group.

5. Click ‘OK’ button.

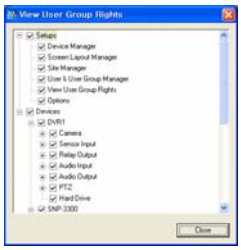
Note	Only the user that belongs to administrator’s group can create a new user. The entire users in the same group have the same rights.

5.2.8. View User Group Rights

A user may view the rights to the user group where the login ID belongs.

Viewing user group rights

Select [Setup] – [View User Group Rights] menu. The assigned control and device are checked.



Note	User group rights are configured through ‘User Group Manager’ menu.

5.2.9. Change Password

User can change the password in this menu.

Changing password

1. Select [Setup] – [Change Password] menu. Enter current password, new password, and confirm password in the setup window.

2. Click ‘OK’ button.

5.2.10. Event Reception

User may decide a method to receive event signal from remote devices to central software. There are two options; one is to receive signals form the entire devices that are registered to the software, and the other is to receive signals form the devices that are displaying video on the screen at the moment. SNM-64S/P occupies system resource of the computer to receive event signals from the device. With this feature, user may modify the software to fit into the provided system resource.

Receiving event from the selected devices
SNM-64S/P receives and displays event logs only from the devices that are displaying video on the screen at the moment. Under this mode, ‘Alarm Manager’ stops operating regardless its settings.

Receiving event from the entire devices
SNM-64S/P receives and displays event logs from the entire devices that are registered to the software.

Changing event receiving mode

1. Select ‘Setup’ – ‘Event Reception’ menu. In the configuration window, select a desired mode.

2. Click ‘Confirm’ button.

Note	SNM-64S is set to run under ‘Receiving event from the selected devices’ mode as default, while SNM-64P is set ‘Receiving event from the entire devices’ mode as default.

Caution	Under ‘Receiving event from the selected devices’ mode in SNM-64P, the program stops operating ‘Alarm Manager’ feature. However, the selected events are displays the logs in the ‘Alarm List’ pane.

5.3. Tools

5.3.1. Overview

Tools are to launch ‘Player’ window, ‘Map Viewer’ window, and ‘Options’ window that runs separately from ‘Viewer’ window. The ‘Viewer’ is the main window through which user may view live video, event/alarm signal, and thumbnail image.

Menu	Icon	Feature	Remark
Player		Launch ‘Player’ window in which recorded data is played.	
Map Viewer		Launch ‘Map Viewer’ window in which event/alarm/video is monitoring over the map images.	
Lock Program		Minimize the program to prevent SNM-64S/P from unauthorized people	
Go Webpage		Access the device’s homepage through Web browser program	
Device Setup		Launch ‘Device Setup’ window.	
Log History		Launch ‘Log History’ window.	
Options		Launch ‘Options’ window user configures options of video quality, data duration of instant player, lock program parameters, fonts, etc.	

5.3.2. Player

User opens ‘Player’ window that plays the recorded data.

5.3.3. Map Viewer

User launches ‘May Viewer’ window that displays maps and device layouts.

5.3.4. Lock Program

User locks and minimizes the program, so that unauthorized people cannot monitor video or control devices on the software while the user is away from the desk. To re-open the window, user should click program icon on the ‘Taskbar’ to the bottom and enter the password.

5.3.5. Go Webpage

User accesses the device’s internet homepage in which user may configure the device as well as monitor live video.

5.3.6. Device Setup

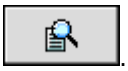
User launches ‘Device Setup’ window that configures the device.

5.3.7. Log History

User reviews program logs of user-login, event, and alarm that occur during the operation.

5.3.7.1. Login history

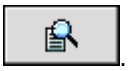
Login history is reviewed by user and by time.

1. Select ‘Tools’ – ‘History’. Then ‘History’ window pops up.
2. Click ‘Login’ tab in the ‘History’ window.
3. Select user group and user ID whose login history to view.
4. Define ‘Time Period’ menu. User may view log of the entire time or a certain time. There are three methods to define time period; one is to set a day with ‘Day’ menu, the other is to go to a certain time with ‘Go to’ menu, and the last is to go to the latest time with ‘Latest’ menu. With ‘Go to’ type, set the starting data/time and duration. With ‘Latest’ type, set the duration of the last time duration from the current time.
5. Select item in ‘Filter’ menu. User may narrow down the type of log to review with this menu.
6. Click ‘Search’ button . The result displays to the right.
7. To reset the parameters, click ‘Initialize’ button  .

5.3.7.2. Event history

Event log history is reviewed by event and by time.

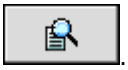
1. Select ‘Tools’ – ‘History’. Then ‘History’ window pops up.
2. Click ‘Event’ tab in the ‘History’ window.
3. Select event type to search.
4. Define ‘Time Period’ menu. It is the same to define time as in ‘Login’ tab. However, user may search log based on two different time information; one is device operation time and one is PC operation time. To run the query based on device operation time, it is necessary to select a certain device in the below ‘Device’ menu.
5. Select a device.
6. Select a user group and a user to narrow down the search result. Program displays the selected user’s log only when a user selected.
7. Click ‘Search’ button . The result displays to the right.
8. Select an event in the list and click ‘Instant Viewer’ button to view live video of the selected channel or click ‘Instant Player’ button to play the recorded video. (For more information, please refer to ‘6.5. Event List’.)

9. To reset the parameters, click ‘Initialize’ button  .

Note	With selecting ‘All’ in ‘Device’ menu, SNM-64S/P runs the query based on PC operation time automatically.

5.3.7.3. Alarm history (SNM-64P)

Alarm log history is reviewed by alarm and by time.

1. Select ‘Tools’ – ‘History’. Then ‘History’ window pops up.
2. Click ‘Alarm’ tab in the ‘History’ window.
3. Select alarm type to search.
4. Define ‘Time Period’ menu. It is the same to define time as in ‘Event’ tab.
5. Select a device.
6. Select a user group and a user to narrow down the search result. Program displays the selected user’s log only when a user selected.
7. Enter a comment to search.
8. Click ‘Search’ button . The result displays to the right.
9. Select an alarm in the list and click ‘Instant Viewer’ button to view live video of the selected channel or click ‘Instant Player’ button to play the recorded video. Select an alarm in the list and click ‘Delete’ button to delete the selected alarm or click ‘Delete All’ button to delete the all alarms in the list. (For more information about other buttons, please refer to ‘6.6. Alarm List’.)
10. To reset the parameters, click ‘Initialize’ button  .

Note	With selecting ‘All’ in ‘Device’ menu, SNM-64S/P runs the query based on PC operation time automatically. Alarm(s) in the ‘Alarm List’ pane of Viewer will not be deleted when the selected alarm(s) is deleted. Related image file(s) stored on the PC will be deleted when the selected alarm(s) is deleted. The deleted image file(s) will no longer be available.

5.3.8. Options

User may customize the settings for Viewer, Instant Player, and Lock Program. For the main **‘Viewer’** window, user may customize the features with below options.

5.3.8.1. **Adjusting audio volume**

1. Select [Tools] – [Options] menu.
2. Click on ‘Audio’ item in the tree to the left of ‘Options’ window.
3. Select a device.
4. Adjust volume by moving slide bar.
5. Click ‘OK’ button.

Note	‘Audio Input’ is the audio received from a remote device to user’s PC. The received audio is output through the PC’s speaker system. ‘Audio Output’ is the audio transmitted from PC to a remote device. The transmitted audio is output through the attached speaker system to the remote device.

5.3.8.2. **Filtering out event/alarm signal**

1. Select [Tools] – [Options] menu.
2. Click on ‘[Filter] – [Normal Event]/[Alarm Event] – [Device]/[Event]’ item in the tree to the left of ‘Options’ window.
3. Uncheck a device or type of signal to filter out the entire signal from the device or the type of signal and does not display on ‘Event List’ and ‘Alarm List’ panes.
4. Click ‘OK’ button.

5.3.8.3. **Configuring snapshot feature**

1. Select [Tools] – [Options] menu.
2. Click on ‘Snapshot’ item in the tree to the left of ‘Options’ window.
3. Define the folder where to archive snapshot image files.
4. Define image file format between Bitmap and JPEG.
5. Click ‘OK’ button.

5.3.8.4. **Configuring data range**

For the **‘Instant Player’** window, user may customize the features as below instructions.

1. Select [Tools] – [Options] menu.

2. Click on ‘Instant Player’ item in the tree to the left of ‘Options’ window.

3. Define video data range with pre- and post-alarm duration when ‘Instant Player’ window is launched through ‘Event/Alarm List’ panes. (base on event/alarm occurrence time information)

4. Define time duration prior to the current time when ‘Instant Player’ window is launched through the main ‘Viewer’ screen. (based on the current time information)

5. Click ‘OK’ button.

Note	SNM-64S/P does record video by receiving live video from network camera or video server. However, it is not dedicated recording software and its performance may vary a lot by network speed and PC performance.

5.3.8.5. **Configuring lock program**

User may activate ‘Lock Program’ feature that minimizes the SNM-64S/P on the PC after the defined idle time.

1. Select [Tools] – [Options] menu.

2. Click on ‘Lock Program’ item in the tree to the left of ‘Options’ window.

3. Check ‘Lock your display’ to activate the feature.

4. Define the idle time duration after which SNM-64S/P is minimized.

Note	User should enter the password in the pop-up window to maximize the SNM-64S/P.

5.3.8.6. **Configuring text information display format**

User may change the text display format including text and background color.

1. Select [Tools] – [Options] menu.

2. Click on ‘Text Display’ item in the tree to the left of ‘Options’ window.

3. Configure the information display format as desired.

4. Click ‘OK’ button.

5.3.8.7. **Configuring video display format**

User may select a method to display video on the screen whether to fit into the screen regardless the original video's width and height ratio or to maintain the original ratio with leaving marginal space between the split-screens.

1. Select [Tools] – [Options] menu.

2. Click on 'Video Display' item in the tree to the left of 'Options' window.

3. Select a format to display video between two options. 'Full' option is to change the ratio between width and height of the original video and fit the video into the selected screen. 'Ratio' option is to maintain the original ratio of the video and leaves the marginal space between the split-screens.

   You can also change the color mode (RGB, YUV) to display video from the 'Color Mode' combo box.

4. Click 'OK' button.

Caution Selecting RGB mode can increase video quality but will result in increased requirements for system resources during displaying.

5.3.8.8. **Configuring recording duration time**

User may define the time duration for which SNM-64S/P continues recording video on a PC. After the time duration, SNM-64S/P stops recording video and archives the file in the PC automatically.

1. Select [Tools] – [Options] menu.

2. Click on 'Record' item in the tree to the left of 'Options' window.

3. Select a time-duration.

4. Click 'OK' button.

5.4. Toolbar

The major features are listed in the toolbar as below. User may launch the corresponding window by clicking on the icon.

Icon	Feature	Remark
	Launching ‘Player’ window	
	Launching ‘Map Viewer’ window	
	Displaying ‘Login Display’ pane	
	Displaying ‘Site Tree’ pane	
	Displaying ‘Alarm List’ pane	SNM-64P
	Displaying ‘Event List’ pane	
	Displaying ‘Pop-up Image’ pane	SNM-64P
	Launching ‘Second Viewer Screen’ window	
	Lock program	
	Go Webpage	
	Launching ‘Device Setup’ window	
	Launching ‘Log History’ window	

Chapter6. Viewer

6.1. Overview

The ‘Viewer’ program is to display live video from multiple channels in customized screen format.

The ‘Viewer’ is the main user-interface of the SNM-64S/P; user may configure the entire program. The ‘Viewer’ consists of several sub-windows and panes including the primary and secondary live screens, event list pane, alarm list pane, thumbnail image pane, site tree pane, and login display pane. User may open or close the panes and screens in the Viewer program.

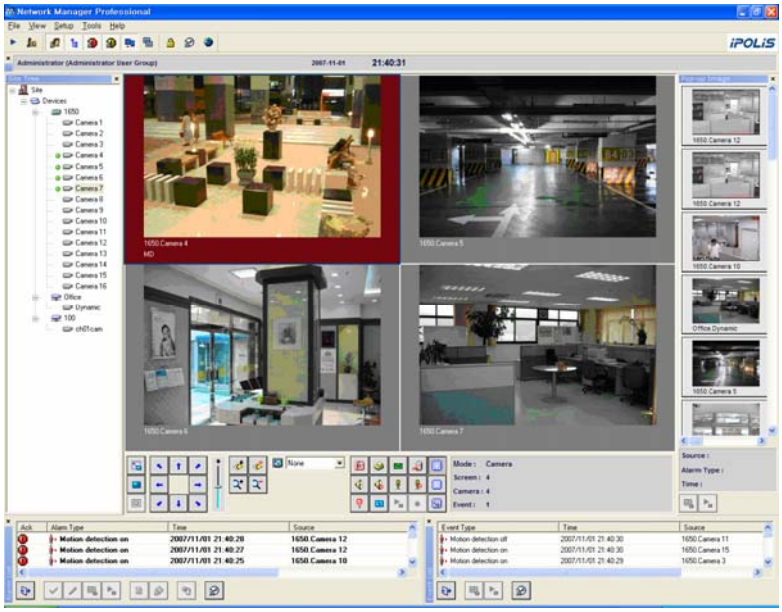
‘Login Display’ pane is to display the current user ID, authority group, data and time information. ‘Site Tree’ pane is to list the entire sites and device under the sites, through which user may connect device and play video on the program. ‘Event List’ pane is to display event signals that are received from the registered device on the program. ‘Alarm List’ pane is to display alarm signals that are configured as special signal out of the entire event signals. User may verity alarm with video and document the situation on this pane. (**SNM-64P**) ‘Pop-up Image’ pane is to display thumbnail images that are captured automatically from alarm-triggered channels. (**SNM-64P**) The primary and second ‘Viewer’ windows are is to play live video from multiple devices. User may control PTZ and relay outputs on remote devices. Also user may capture or print image on the screens.

Monitoring live video in ‘Viewer’ program

1. Open ‘SNM-64S/P’ program. Select ID and enter password in login window.

2. Click a camera icon or device icon in the site tree.

3. Once the camera or device is connected, video is displayed on the screen automatically. The connected channel or device is marked with a green dot in the front of the icon.



6.2. View Video

6.2.1. Overview

There are three ways to play live video on the main 'Viewer' program. Click camera icon or camera name on the site tree. Click device icon or device name on the site tree. Click screen layout icon or screen layout name on the site tree.

Note	If the device or screen layout icon or name is clicked, the Viewer splits screen into the proper number that matches with the entire number of channels of the selected device or screen layout. After connecting channels, user may drag and drop the video on any other available screen in the Viewer program.

6.2.2. Play video from the entire channels of a device at once

User may connect the entire channels of a device and play video from all the channels at once.

Operation process

1. Select a device in the site tree pane to the left of the Viewer program.
2. Click on device icon or name in the site tree.
3. The connected device is marked with green dot in the front of the icon.

Note	Click on the device icon or name again to disconnect. The Viewer program splits the screen into proper numbers that match with the number of channels.

6.2.3. Play video from a certain camera

Operation process

1. Split the Viewer screen into a desired number with 'Screen Patterns' button . The program provides various split options including 1, 4, 6, 8, 9, 16, 25, 36, 49, and 64-split mode.
2. Click on a certain screen in which to play video.
3. Select a camera in the site tree pane to the left of the Viewer program.
4. Click on camera icon or name in the site tree.
5. The connected camera is marked with green dot in the front of the icon. Video plays in the selected screen.

Note	Click on the camera icon or name again to disconnect. Quad-split mode is a default setting, and user may choose among 1, 4, 6, 8, 9, 16, 25, 36, 49, 64 numbers to split

6.2.4. Play video through pre-composed screen layout

Operation process

1. Select a screen layout in the site tree pane to the left of the Viewer program.
2. Click on screen layout icon or name in the site tree.
3. The connected camera is marked with green dot in the front of the icon.

Note	Click on the camera icon or name again to disconnect. Viewer program connects channels as pre-defined and plays videos in pre-defined layout.

6.2.5. Play video on the second screen

User may play video on the 'Second Screen' window. With the 'Second Screen', user may monitor up to 128 channels' of video in two monitors. To run the 'Second Screen', it is necessary to attach two monitor screens to a PC.

Operation process

1. Select [View] – [Second Screen] menu or click the 'Second Screen' icon in tool bar on the top of the Viewer program.
2. Drag and drop the Second Screen on to the second monitor.
3. Split the Viewer screen into a desired number with 'Screen Patterns' button . The program provides various split options including 1, 4, 6, 8, 9, 16, 25, 36, 49, and 64-split mode.
4. Click on camera, device or screen layout icon or name in the site tree.
5. The connected camera, device, or screen layout is marked with green dot in the front of the icon. Viewer plays videos on the Second Screen.
6. Click on the camera, device or screen layout icon or name again to disconnect.

Note	Click on the camera, device or screen layout icon or name again to disconnect.

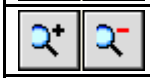
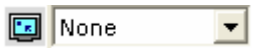
Caution

It is necessary to attach a video card that supports two or more monitors a PC if user wants to run two or more monitors in the PC.

6.3. Controls

6.3.1. Overview

User may control PTZ and relay outputs on remote devices. User may also capture or print image on the screens.

Icon	Feature	Remark
	Go to full-screen mode	
	Selects screen split pattern (1,4,6,8,9,16,25,36,49, and 64)	
	Display video at the original size (resolution)	
	Pans and tilts dome camera Goes to PTZ home position	
	Controls focus (Far/Near)	
	Controls zoom (In/out)	
	Controls preset	
	Makes a snapshot image (JPEG or Bitmap file)	
	Prints image	
	Sends an e-Mail	SNM-64P
	Transmits an image to FTP server	SNM-64P
	Controls relay outputs	
	Turns on speaker to hear sound from device	
	Turns off the speaker	
	Turns on microphone to send voice message to device	
	Turns off the microphone	
	Flips image upside down	
	Launches ‘Instant Player’ window	
	Recording Start/Stop	
	Displays camera information on the screen	
	Turns on / off ‘Deinterlace’ feature	
	Pops up the OSD menu to set up a camera	

Note	Some of the menus are supported through context menu over the video. Click the right button on the mouse to see the menu.

Caution	The entire menus are not supported in every device. Some menus are not supported in certain devices.

6.3.2. Play video in full-screen mode

User may play live or recorded video in full-screen mode with this menu. This menu is supported in the main 'Viewer' and 'Player' programs.

Operation process

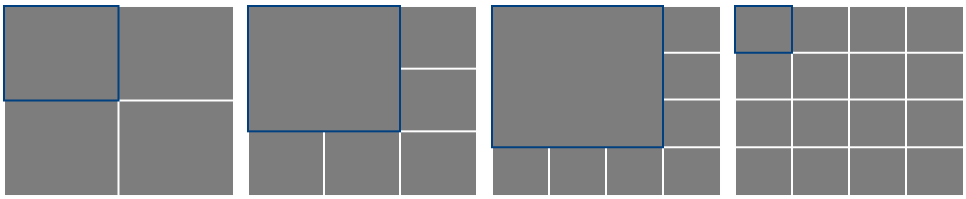
1. Click 'Full Screen' icon on the screen.
2. Press 'Esc' button on the keyboard to go back to normal screen mode.

6.3.3. Decide screen patterns

User may split screens (Primary Screen or Second Screen) into different patterns among 1, 4, 6, 8, 9, 16, 25, 36, 49, and 64-split options.

Operation process

1. Click 'Screen Patterns' icon on the screen.
2. Select a number to split.



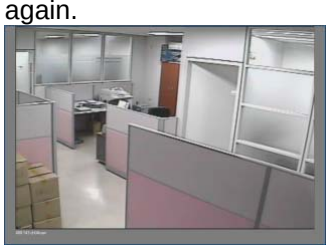
6.3.4. Play video at original size (resolution)

User may play video at the original size in the single-screen mode. This feature is available in main viewer program.

Operation process

1. Double click on a video screen, then the selected video plays at the original size (resolution) in a single-screen mode.

2. To expand the video and fit into the screen size, click ‘Original size/ Expanded size’ button again.



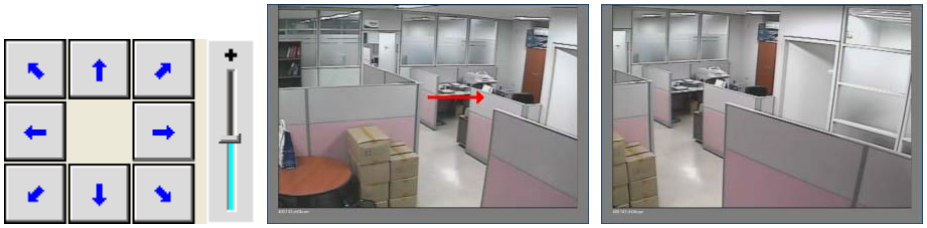
Note ‘Original size’ menu is activated only in single-screen mode.

6.3.5. Control PTZ

User may control the attached camera PTZ mechanism to DVR or video server. With a PTZ integrated network camera, user may also control the mechanism remotely. The controls are provided in Main Viewer and Instant Viewer windows.

Panning & Tilting

1. Click on a camera in the screen.
2. Click left, right, up and down arrow button to move the camera to the corresponding direction.
3. To change the PTZ camera moving speed, drag up or down the slide bar to the right of the arrow buttons. The bar is dragged up and PTZ moves fast.



Focusing

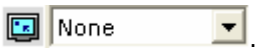
1. Click on a camera in the screen.
2. Click near or far button .

Zooming

1. Click on a camera in the screen.

2. Click zoom in or out button .

Controlling preset

1. Click on a camera in the screen.
2. Select a desired preset number in the pull-down list 

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6.3.6. Snapshot an image

User may snapshot an image and save it as JPEG or Bitmap image file. The feature is available in main Viewer, main Player, Instant Viewer, and Instant Player.

Operation process

1. Select a video by clicking on the screen.
2. Click 'Snapshot' icon on the screen.
3. A snapshot image is stored into the default directory in pre-defined file format. When the snapshot file is stored, the corresponding notification message appears to the right bottom on the monitor.

Note	Archiving directory of the snapshot image is defined in [Tools] - [Options] menu.

6.3.7. Print an image

User may print an image on a paper. The feature is available in main Viewer, main Player, Instant Viewer, and Instant Player.

Operation process

1. Select a video by clicking on the screen.
2. Click 'Print' icon on the screen. The program captures an image from the screen and prints it out on a paper.

6.3.8. Send an e-Mail (SNM-64P)

User may send an e-mail with attaching an image file. The feature is available in main Viewer, main Player, and Instant Viewer.

Operation process

1. Select a video by clicking on the screen.
2. Click ‘E-Mail’ icon on the screen.
3. The program captures an image and sends it through an e-mail. The e-mail is sent to the default recipient account.
4. When e-mail sent successfully, the corresponding notification message appears to the right bottom on the monitor.

Note	Without listing an e-mail account in the program, an error message appears telling the status. To perform this action, user should register at least an e-mail account to the program in [Library] – [e-Mail] menu to the bottom in ‘Alarm Manager’ window.

6.3.9. Transmit an image to FTP server (SNM-64P)

User may transmit an image file to a FTP server. The feature is available in main Viewer, main Player, and Instant Viewer.

Operation process

1. Select a video by clicking on the screen.
2. Click ‘FTP’ icon on the screen.
3. The program captures an image and transmits it to a FTP server. The file is transmitted to the default server in the list.
4. When a file is transmitted successfully, the corresponding notification message appears to the right bottom on the monitor.

Note	Without listing an FTP server in the program, an error message appears telling the status. To perform this action, user should register at least an FTP server to the program in [Library] – [FTP] menu to the bottom in ‘Alarm Manager’ window.

6.3.10. Turn on relay output

User may control relay outputs on a device manually over the network. The feature is available in main Viewer and Instant Viewer.

Operation process

Relay output control is to turn on and off the attached device to the reply output port in a device. The controls are provided in Main Viewer and Instant Viewer windows.

1. Select a device to which the target device is attached. User may select a device by clicking any video channel which belongs to the device on the screen.

2. Click the relay control button , then a control window pops up.

3. Click a relay port button to activate the attached device. The device is activated for the moment when user presses and holds the button.

6.3.11. Turn on/off speaker

User may turn on and off the speaker which plays live sound from a remote device over the network. The feature is available in main Viewer and Instant Viewer.

Operation process

1. Select a video channel that carries live audio data.

2. Click speaker-on icon to play audio.

3. Click speaker-off icon to stop playing audio.

Note The volume can be adjusted in [Tools] – [Options] menu.

6.3.12. Turn on/off microphone

User may turn on and off the microphone which transmits voice message to a remote device over the network. The feature is available in main Viewer and Instant Viewer.

Operation process

1. Select a video channel that belongs to a device which is attached with an external speaker system.

2. Click microphone-on icon to play audio.

3. Speak on a microphone that is attached to a PC.

4. Click speaker-off icon to stop sending audio to a device.

Note The volume can be adjusted in [Tools] – [Options] menu.

6.3.13. Flip video upside down

User may flip video upside down especially when the camera is installed upside down. The feature is available in main Viewer, main Player and Instant Viewer.

Operation process

1. Select a video channel to flip.

2. Click ‘Flip’ icon to flip live video upside down.

6.3.14. Play video instantly (DVR/Network Recorder only)

User may play video of the selected channel instantly by launching ‘Instant Viewer’ windows from the live video screen. Instant Viewer windows opens and plays video for the latest moment. User defines the duration in ‘Options’ menu.

Operation process

1. Select a video channel by clicking on the live viewer screen.

2. Click ‘Instant Player’ icon .

Caution	‘Instant Player’ feature is compatible only with DVR devices. By selecting a video channel of network camera and video server, this menu is de-activated.

6.3.15. Record & Playback

User may record live video from network cameras and video servers on the PC instantly. User may start recording video by selecting a channel and clicking on the recording button. SNM-64S/P records video as received for resolution, quality and speed. Each channel records video independently and multiple channels may record video concurrently.

The recorded file is archived on a PC, and user may play the file with SNM-64S/P Player software. Archived files are found by each camera, and user may need to click on ‘Local’ tab in player software.

Recording feature is available with main viewer and instant viewer.

Recording video instantly

1. Select a video channel by clicking on the live viewer screen.

2. Click ‘Start Recording’ icon . Then SNM-64S/P starts recording video on a PC. The channel marks ‘REC’ on the video screen. At the moment, the button turns into ‘Stop Recording’ button.

3. Click ‘Stop Recording’ icon to stop recording manually. Otherwise, SNM-64S/P stops recording video in the pre-defined time duration.

Playing video

1. Execute ‘player’ software and click on ‘Local’ tab.

2. Click ‘Camera Select’ button in search pane.

3. Select a device and a channel (camera) of which video to play and click ‘Open’ button.
4. Set date and time. There are four options including all, day, go to, and latest. User may choose one of the options to set the data and time.
5. Click query button . The result displays in the below pane.
6. Select a file in the list and click play button . Then the selected video plays in the screen to the right.

Caution	SNM-64S/P records video at the same resolution, quality and speed as is received from network camera or video server.

Note	Recording duration time can be adjusted in [Tools] – [Options] men. The default duration is 5 minutes. Recorded video is archived under ‘\\NMRecordignXX’ (XX stands for version (Standard and Pro) and language. ‘SNM-64S/P’ program does record video by receiving live video from network camera or video server. However, it is not dedicated recording software and its performance may vary a lot by network speed and PC performance.

6.3.16. OSD information

User may display or hide camera information on the screen.

Operation process

1. Select a video channel by clicking on the live viewer screen.
2. Click OSD icon , then camera information is displayed on the selected screen.

6.3.17. De-interlace video

User may apply de-interlacing feature to a screen.

Operation process

1. Select a video channel by clicking on the live viewer screen.
2. Click Deinterlace icon , then the selected video display with de-interlaced. To stop the feature, click again the icon.

Note	‘De-interlace’ is to make D1 or Full resolution image natural by smoothing the interlaced lines of even and odd images.

6.3.18. Setup camera

User may setup the attached analog camera to DVR and video server. User can make the attached camera to display the OSD setup menu over the screen with this menu.

Operation process

1. Select a video channel by clicking on the live viewer screen.
2. Click camera setup icon , then the setup menu appears on the screen.

Camera setup OSD buttons

Button	Feature	Remark
	Move selection up and down on the OSD menu	
	Move selection left and right on the OSD menu	
	Make OSD menu appear on the screen, or process selection to upper/lower level menu.	
	Exit the OSD menu	

Caution ‘Setup Camera’ menu is available on when the camera is wired to DVR or server for the communication.

Caution For the detailed information on camera settings, please refer to the camera manual.

6.4. Pop up thumbnail image (SNM-64P)

User may configure the SNM-64P to capture image and display the thumbnail image in 'Pop-up Image' pane automatically when an alarm occur.

The latest image places on the top in the list. User may launch Instant Viewer or Instantly Player window from the image.

Note	User should configure the action in [Setup] – [Alarm Manager] menu. For more information, please refer to '5.2.4.1 Action programming – [Pop-up a thumbnail image]'

6.4.1. Displaying thumbnail images

1. Select [View] – [Pop-up Image] menu or click the 'Pop-up Image' icon in tool bar on the top of the Viewer program.

2. Thumbnail image are displayed in the pane automatically.

Note	User should configure the action per alarm signal in 'Alarm Manager' menu.

6.4.2. Launching 'Instant Viewer' to play live video

1. Select a thumbnail image in the pane.

2. Click 'Instant Viewer' icon . Live video plays in a single-channel viewer window.

Note	Instant Viewer feature is supported with all the devices including DVR, video server and network. By clicking on 'Start Recording' button in the window, the live video is recorded instantly and archived on the PC automatically.

6.4.3. Launching 'Instant Player' to play recorded video

1. Select a thumbnail image in the pane.

2. Click 'Instant Player' icon . Recorded video plays in a single-channel player window.

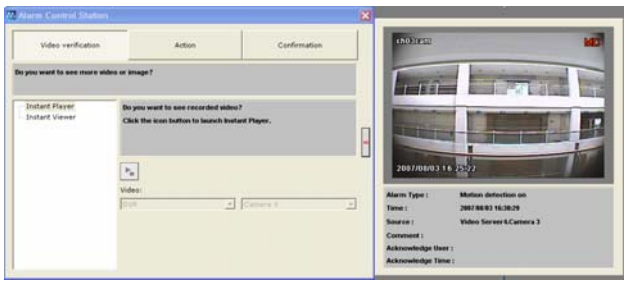
Note	User may change the settings in [Tools] – [Options] menu. As default, 'Instant Player' window pulls 30 seconds' video prior to the alarm occurring time and 1 minute's video after the alarm occurring time.

Caution	'Instant Player' feature is compatible only with DVR devices. By selecting a video channel of network camera and video server, this menu is de-activated.

6.4.4. Launching 'Alarm Control Station' to process alarm thoroughly

1. Click twice a thumbnail image in the pane.

2. 'Alarm Control Station' window pops up. Verify alarm with video, perform reaction against alarm, and document the situation. (For more information, please refer to 'Alarm Control Station' chapter in the following pages.)



6.5. Event List

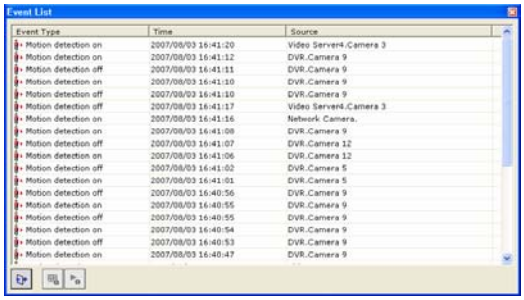
User may monitor event signals that is generated by devices and transmitted to SNM-64S/P in real-time.

User may launch ‘Instant Viewer’ to play live video or ‘Instant Player’ to play recorded video based on event signals. With ‘Filter’ menu, it is possible to filter out unnecessary event signals out of the pane.

6.5.1. Displaying event signals

1. Select [View] – [Event List] menu or click the ‘Event List’ icon in tool bar on the top of the Viewer program.

2. Event signals are displayed in the pane automatically. (User does not need to configure to receive event signals from device, and the SNM-64S/P receives and displays event signal from the registered devices automatically.)



Note	Event List pane has docking-window feature, and fits into any location on the ‘Primary Screen’ window.

6.5.2. Filtering out certain event signals

1. Click ‘Filter’ icon to the bottom of the Event List pane.

2. ‘Options’ window appears.

3. Click on ‘[Filter] – [Normal Event] – [Device]/[Event]’ item in the tree to the left of ‘Options’ window.

4. Uncheck a device or type of signal to filter out the entire signal from the device or the type of signal and does not display on ‘Event List’ panes.

5. Click ‘OK’ button.

6.5.3. Launching ‘Instant Viewer’ to play live video

1. Select an event log in the pane.

2. Click ‘Instant Viewer’ icon . Live video plays in a single-channel viewer window.

Note	Instant Viewer supports ‘Snapshot’ and ‘Print’ features, and user may use them at the same manner in the main viewer. (For more information, please refer to ‘6.8. Instant Viewer’.)

6.5.4. Launching ‘Instant Player’ to play recorded video (DVR/Network Recorder only)

1. Select an event log in the pane.
2. Click ‘Instant Player’ icon . Recorded video plays in a single-channel player window.

Note	User may change the settings in [Tools] – [Options] menu. As default, ‘Instant Player’ window pulls 30 seconds’ video prior to the alarm occurring time and 1 minute’s video after the alarm occurring time.

Caution	‘Instant Player’ feature is compatible only with DVR devices. By selecting a video channel of network camera and video server, this menu is de-activated.

6.5.5. Reviewing event history

1. Click ‘Log History’ button to the bottom of the ‘Event List’ pane. Then the history search window pops up.
2. Set parameters in the window and click ‘Search’ button . (For more information, please refer to ‘5.3.6. History’.)

6.6. Alarm List (SNM-64P)

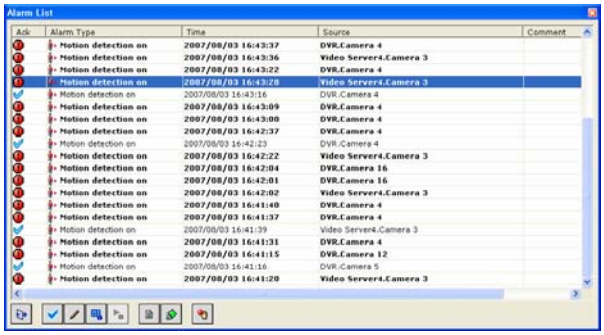
User may monitor alarm signals that are selected out of event signals and processed with special care in SNM-64S/P.

User may launch ‘Instant Viewer’ to play live video or ‘Instant Player’ to play recorded video based on event signals. With ‘Filter’ menu, it is possible to filter out some alarm signals out of the pane if desired. User can change the listing status of each alarm signal and leave a comment to alarm log.

6.6.1. Displaying alarm signals

1. Select [View] – [Alarm List] menu or click the ‘Alarm List’ icon in tool bar on the top of the Viewer program.

2. Alarm signals are displayed in the pane automatically.



Note	Alarm List pane has docking-window feature, and fits into any location on the ‘Primary Screen’ window.

6.6.2. Filtering out certain alarm signals

1. Click ‘Filter’ icon to the bottom of the Alarm List pane.

2. ‘Options’ window appears.

3. Click on ‘[Filter] – [Alarm Event] – [Device]/[Event]’ item in the tree to the left of ‘Options’ window.

4. Uncheck a device or type of signal to filter out the entire signal from the device or the type of signal and does not display on ‘Alarm List’ panes.

5. Click ‘OK’ button.

6.6.3. Marking an alarm acknowledgement status

1. Select an alarm log in the pane.

2. Click ‘Acknowledgement’ icon to the bottom of the Alarm List pane.

3. The selected alarm log changes its status remark as from unchecked to checked.

6.6.4. Adding a comment to an alarm

1. Select an alarm log in the pane.
2. Click ‘Comment’ icon to the bottom of the Alarm List pane.
3. Enter a comment in the pop-up window.
4. Click ‘OK’ button.

6.6.5. Launching ‘Instant Viewer’ to play live video

1. Select an alarm log in the pane.
2. Click ‘Instant Viewer’ icon . Live video plays in a single-channel viewer window.

6.6.6. Launching ‘Instant Player’ to play recorded video (DVR/Network Recorder only)

1. Select an alarm log in the pane.
2. Click ‘Instant Player’ icon . Recorded video plays in a single-channel player window.

Note	User may change the settings in [Tools] – [Options] menu. As default, ‘Instant Player’ window pulls 30 seconds’ video prior to the alarm occurring time and 1 minute’s video after the alarm occurring time.

Caution	‘Instant Player’ feature is compatible only with DVR devices. By selecting a video channel of network camera and video server, this menu is de-activated.

6.6.7. Viewing a detailed information of an alarm

1. Select an alarm log in the pane.
2. Click ‘Details’ icon to the bottom of the Alarm List pane.
3. In the pop-up window, detailed information is displayed with captured image if available. Information includes alarm type, occurrence time, alarm source (device and channel), comment, ACK user, and ACK time.

6.6.8. Viewing a programmed actions against the alarm

1. Select an alarm log in the pane.
2. Click ‘Action’ icon to the bottom of the Alarm List pane.
3. In the pop-up window, programmed actions are displayed in the list.

6.6.9. Launching ‘Alarm Control Station’ to process alarm thoroughly

1. Select an alarm log in the pane.
2. Click ‘Alarm Control Station’ icon to the bottom of the Alarm List pane.
3. Verify alarm with video, perform reaction against alarm, and document the situation. (For more information, please refer to ‘Alarm Control Station’ chapter in the following pages.)

6.6.10. Reviewing alarm history

1. Click ‘Log History’ button to the bottom of the ‘Alarm List’ pane. Then the history search window pops up.
2. Set parameters in the window and click ‘Search’ button . (For more information, please refer to ‘5.3.6. History’.)

6.7. Alarm Control Station (SNM-64P)

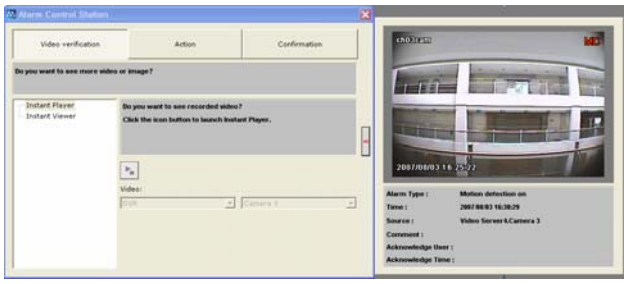
User may verify alarm with live/record video or captured image, do actions, and make documentation manually in ‘Alarm Control Station’ window.

‘Alarm Control Station’ window has three tabs of ‘Video verification’, ‘Action’, and ‘Confirmation’.

6.7.1. Launching the alarm control station window

1. Click twice an alarm log in the list on ‘Alarm Log’ pane.

2. Or, select an alarm log in the pane and click ‘Alarm control station’ icon Or, click twice a thumbnail image in ‘Pop-up Image’ pane. In this case, the selected alarm always displays the captured image.



6.7.2. Verifying an alarm with video

1. Click ‘Video verification’ tab in ‘Alarm Control Station’ window.

2. If ‘Pop-up Image’ action is programmed against the alarm, captured image appears to the right side of the window.

3. Select ‘Instant Player’ or ‘Instant Viewer’ to play recorded or live video from the channel that generates the event signal.

4. Click ‘Instant Player’ icon or ‘Instant Viewer’ icon to launch the respective window.

6.7.3. Making actions against an alarm

1. Click ‘Action’ tab in ‘Alarm Control Station’ window.

2. Select a desired action in the list to the left of the window. It lists sending an e-Mail, transmitting an image, printing an image, and capturing an image.

3. Click ‘e-Mail’ icon, ‘FTP’ icon, ‘Print’ icon, and ‘Snapshot’ icon for the corresponding actions.

6.7.4. Making confirmation to an alarm

1. Click ‘Confirmation’ tab in ‘Alarm Control Station’ window.

2. Select a desired action in the list to the left of the window. It lists ‘Acknowledge’ and ‘Comments’.

3. Click ‘Comment’ icon to enter a short comment into the log.

4. Click ‘Acknowledge’ icon to mark the status as checked.

6.8. Instant Viewer

User may play live video from a video channel instantly through ‘Event List’ pane, ‘Alarm List’ pane, and ‘Pop-up Image’ pane.

6.8.1. Launching from ‘Event List’ pane

1. Select an event log in the pane.

2. Click ‘Instant Viewer’ icon . Live video plays in a single-channel viewer window.

6.8.2. Launching from ‘Alarm List’ pane

1. Select an alarm log in the pane.

2. Click ‘Instant Viewer’ icon. Live video plays in a single-channel viewer window.

6.8.3. Launching from ‘Pop-up Image’ pane

1. Select a thumbnail image in the pane.

2. Click ‘Instant Viewer’ icon. Live video plays in a single-channel viewer window.

Note	Last command overrides the previous command. If ‘Instant Viewer’ is already open and plays live video and user clicks the icon on another alarm/event, the former channel is disconnected and the later channel is connected to play video.

Chapter7. Player

7.1. Overview

The ‘Player’ program is to play recorded video from a DVR/Network Recorder. The program provides easy ways of searching data including data & time search and timeline search. User may back up data from DVR/Network Recorder to PC and convert the data into AVI format.

Playing recorded video in ‘Player’ program

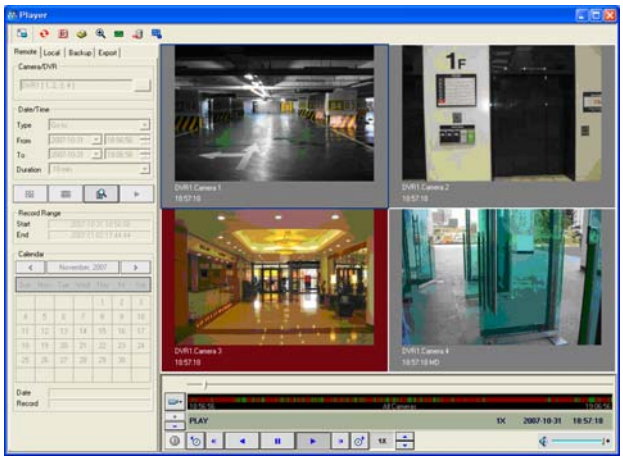
1. Open ‘SNM-64S/P’ program.

2. Select [Tools] – [Player] menu or click ‘Player’ icon in tool bar on the top of the Viewer program.

3. Select DVR and camera(s) in ‘Camera/DVR’ list.

4. Define approach type, and time duration of the data.

5. Click ‘Play’ icon .



Note The ‘Player’ supports up to 16 screens to play video from a single DVR unit.

7.2. Search (DVR/Network Recorder only)

7.2.1. Overview

There are two ways to search data; 'Time Search' and 'Timeline Search'.

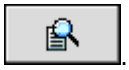
'**Time Search**' is to access data directly with data and time information.

'**Timeline Search**' is access data through timeline graph of the selected time duration.

Note	The process to play video that is recorded by SNM-64S/P on a PC is slightly different to the process to play video from DVR. (For more information to play PC recorded video, please refer to '7.6.1 Play video recorded on a PC')

7.2.2. Time Search

Playing video by searching 'Time Search' menu

1. Click Camera/DVR search icon .
2. Select DVR and camera(s) and click 'OK' button.
3. Select type to define time duration. There are two types; one is to go to a certain time with 'Go to' menu, and the other is to go to the latest time with 'Latest' menu. With 'Go to' type, set the starting data/time and duration. With 'Latest' type, set the duration of the last time duration from the current time.
4. Click 'Play' icon .
5. To define the search conditions again, click 'New Query' icon  .

Note	The 'Player' supports up to 16 screens to play video from a single DVR unit.

7.2.3. Timeline Search

Playing video by searching 'Timeline Search' menu

1. Click 'Timeline Search' icon in the Player program.
2. Click Camera/DVR search icon in the 'Timeline Search' window.
3. Select DVR and camera(s) and click 'OK' button.

4. Select type to define time duration. There are two types; one is to go to a certain time with ‘Go to’ menu, and the other is to go to the latest time with ‘Latest’ menu. With ‘Go to’ type, set the starting data/time and duration. With ‘Latest’ type, set the duration of the last time duration from the current time.

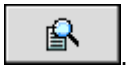
5. Click ‘Query’ icon .

6. The search result displays in graph on the timeline.

7. Drag the slide bar to a desired position on the timeline. The exact position is displayed with time on the bottom of the graph.

8. Click ‘Play’ icon .

9. A ‘Timeline Search’ window closes and video plays from the designated time point in ‘Play’ window.

10. To define the search conditions again, click ‘New Query’ icon  .

Note

The ‘Player’ supports up to 16 screens to play video from a single DVR unit.

7.3. Playback (DVR/Network Recorder only)

7.3.1. Overview

The ‘Player’ plays the searched data by dividing the screen properly to the total number of channels.

Below each video screen, camera name, data/time information, and event information are display in the caption bar. The screen border turns into red when event-triggered video is played.

User may play a certain channel in single-screen mode by double-clicking on a desired video. The screen returns to original model by double-clicking on the screen again.

With timeline and play status panes, user can view information on the video. The play control buttons allow use move playing point or change play direction or speed. User may capture or print an image with utility icons.

7.3.2. Timeline

The timeline displays data existence (whether to exist or not) and type (normal or event) inside the searched duration.

The green graph on the line signifies video data recorded in normal situation and the red graph tells the data was recorded under event situation. The starting and ending time are marked on left and right ends. If there are no recorded data in the duration, the duration is marked in black on the line.

Note	When multiple channels are played, the timeline merges data information from individual camera and displays it into a single line

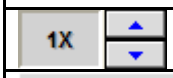
7.3.3. Status information

Below the timeline, play status information is displayed.

To the left, the current play control type is displayed. In the middle, play speed is displayed. To the right, recorded data/time information is displayed.

7.3.4. Playback controls

User may play video with changing data duration, play speed, play direction, and speaker volume with below controls.

Button	Feature	Remark
	Go to previous duration. The same length of time duration is applied as the current data in pulling data from DVR with this button. (For example, if current video data is of 12:00:00~12:09:59, this button brings and plays video of 11:50:00~11:59:59)	
	Step backward	
	Reverse play	
	Pause	
	Play video	
	Step forward	
	Go to next duration. The same length of time duration is applied as the current data in pulling data from DVR with this button. (For example, if current video data is of 12:00:00~12:09:59, this button brings and plays video of 12:10:00~12:19:59)	
	Adjust play speed	
	Adjust speaker volume	

Caution

The entire menus are not supported in every device. Some menus are not supported in certain devices.

7.4. Controls

User may capture image or print image from the recorded video with below controls.

Button	Feature	Remark
	Plays video in full-screen mode	
	Refreshes the current connection by disconnecting and reconnecting to the current device and channel.	
	Snapshots an image in JPEG or Bitmap format	
	Send an image to the printer	
	Sends out an e-Mail by attaching an image file	**SNM-64P**
	Transmits an image file to FTP server	**SNM-64P**
	Zooms in /out on the image digitally	
	Launching 'Instant Viewer' to play live video	

Note Controls function as the same way as do in Viewer window.

Caution The entire list of menus is not supported in every device. Some menus are not supported in certain devices.

Utilizing digital zoom feature

1. Open 'Digital Zoom' window by clicking on the icon .

2. In the window, a blue box appears over the image in the center of the screen. The image inside the blue box is displayed in the player screen.

3. Zoom in a certain part with plus (+) button. User may enlarge the image by 200%, 400%, 800%, and 1600%. User may adjust the box size manually by dragging horizontal or vertical lines on the box with a mouse.

4. Move the selection area by dragging the box with a mouse.

5. Click ‘Close’ button to return to original size.

Note Image is magnified up to 16 times (1600%).

7.5. Remote (DVR/Network Recorder only)

User may access DVR/Network Recorder in remote location and plays data on SNM-64S/P in the central location.

Playing video from DVR/Network Recorder

1. Select ‘Remote’ tab.
2. Click ‘Camera/DVR’ selection button .
3. Select DVR and desired cameras. Then click ‘Ok’ button.
4. Define time duration.
5. Click ‘Play’ button . Video data of selected camera(s) and defined time plays on the screen.

Note

The ‘Player’ supports up to 16 screens to play video from a single DVR unit.

7.6. Local

User may play video that is backed up from DVR/Network Recorder to a PC or recorded on a PC by SNM-64S/P locally.

7.6.1. Play recorded video

1. Select ‘Local’ tab.
2. Click ‘Network Camera/Video Server’ selection button .
3. Select desired device and camera. Then click ‘Ok’ button.
4. Define time duration. It is possible to see the entire data or by a day.
5. Click ‘Query’ button . Then the recorded video file lists up in the result pane. Select a video file in the list.
6. Click ‘Play’ button . Video data of selected camera(s) and defined time plays on the screen.

7.6.2. Play backup video

1. Select ‘Local’ tab.
2. Click ‘File Open’ button .
3. In the query window, select a file and click ‘Open’ button. The select file plays video on the screen.

7.7. Backup (DVR/Network Recorder only)

User may back up data from a DVR/Network Recorder to a PC remotely.

Making data backup

1. Click ‘Backup’ tab in the Player program.
2. Click Camera search icon in the window.
3. Select a DVR and a camera and click ‘OK’ button.
4. Select type to define time duration.
5. Click ‘Play’ icon . Backup status displays in the below progress bar. When finished, ‘Completed’ message appear on the screen.

Note	A data file is copied in the default folder on the PC. The default folder is \Program Files\Samsung Techwin\SNM-64S/P\Backup

7.8. Export (Convert file format into AVI)

User may convert backup file format from the propriety of the DVR to AVI format.

7.8.1. Converting recorded video file format into AVI

1. Select ‘Local’ tab.
2. Click ‘Network Camera/Video Server’ selection button .
3. Select desired device and camera. Then click ‘Ok’ button.
4. Define time duration. It is possible to see the entire data or by a day.
5. Click ‘Query’ button . Then the recorded video file lists up in the result pane. Select a video file in the list.
6. Click ‘Play’ button . Conversion status displays in the below progress bar.
7. When finished, ‘Completed’ message appear on the screen.

7.8.2. Converting backup video file format into AVI

1. Click ‘Local’ tab in the Player program.
2. Click ‘Open’ icon . Search backup file in the window.
3. Click ‘Open’ button after selecting a file. The entire channels in the selected video file are listed in ‘Source’ menu.
4. Click ‘Play’ icon . Conversion status displays in the below progress bar.
5. When finished, ‘Completed’ message appear on the screen.

Note	The converted AVI file is archived in \Program Files\Samsung Techwin\SNM-64S/P\Backup folder. The converted AVI file is compatible with a standard video player software that supports XviD MPEG-4 Video Codec.

7.9. Instant Player (DVR/Network Recorder only)

Instant Player allows user to play a single-channel video instantly through the main 'Viewer', 'Event List' pane, or 'Alarm List' pane.

Note	Last command overrides the previous command. If 'Instant Player' is already open and plays live video and user clicks the icon on another alarm/event, the former channel is disconnected and the later channel is connected to play video.

Caution	'Instant Player' feature is compatible only with DVR devices. By selecting a video channel of network camera and video server, this menu is de-activated.

7.9.1. Playing video with monitoring live video

1. Select a live video channel by clicking on the screen
2. Click 'Instant Player' icon in the below. Recorded video plays in a single-channel player window.

Note	As default, 'Instant Player' window pulls 1 minute's video prior to the current time.

7.9.2. Launching 'Instant Player' with event signal

1. Select an event log in the pane.
2. Click 'Instant Player' icon. Recorded video plays in a single-channel player window.

Note	As default, 'Instant Player' window pulls 30 seconds' video prior to the alarm occurring time and 1 minute's video after the alarm occurring time.

7.9.3. Launching 'Instant Player' with alarm signal (SNM-64P)

1. Select an alarm log in the pane.
2. Click 'Instant Player' icon. Recorded video plays in a single-channel player window.

Note	As default, ‘Instant Player’ window pulls 30 seconds’ video prior to the alarm occurring time and 1 minute’s video after the alarm occurring time.

7.9.4. Launching ‘Instant Player’ with thumbnail image (SNM-64P)

1. Select a thumbnail image in the pane.

2. Click ‘Instant Player’ icon. Recorded video plays in a single-channel player window.

Note	As default, ‘Instant Player’ window pulls 30 seconds’ video prior to the alarm occurring time and 1 minute’s video after the alarm occurring time.

Chapter8. Map Viewer

8.1. Overview

The ‘Map Viewer’ program is to display alarm or event signals over map images so that user may acknowledge alarm/event status with geographical information.

User may perceive alarm/event occurrence status with visual notifications on icons over map images and audible notifications on speaker system of a PC. By clicking on the camera icons on maps, user may launch ‘Instant Viewer’ or ‘Instant Player’ window.

The entire map supports up to 16 layers in vertical structure and 64 maps in horizontal structure.

To utilize ‘Map Viewer’ properly, user should configure map before running ‘Map Viewer’ program.

The configuration has three steps; map group configuration, map image composition, and component icon layout. User may utilize this feature properly after accomplishing the entire process in turn.

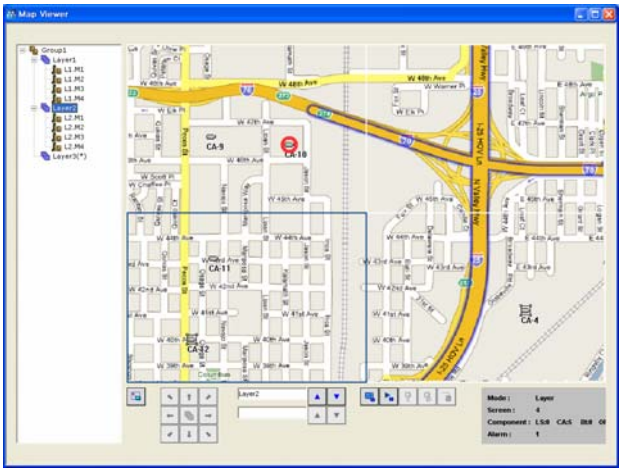
Launching ‘Map Viewer’ program

1. Select [Tools] – [May Viewer] menu or click ‘Map Viewer’ icon in tool bar on the top of the Viewer program.

2. Click a map in the map tree to the left and the selected map displays on the screen to the right.

3. Click a layer in the map tree to the left and the entire maps in the selected layer display on the screen to the right.

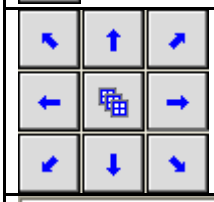
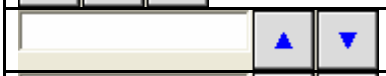
4. With receiving event/alarm signal, the related device (camera, sensor, etc) icon blinks on the map.



Note	The same rules of event/alarm processing in ‘Viewer’ program applies in ‘Map Viewer’ program. SNM-64P utilizes alarm signal in ‘Map Viewer’ program while SNM-64S utilizes.

8.2. Controls

User may monitor live video, play recorded video, and control device over map images.

Button	Feature	Remark
	Go to full-screen mode	
	Move around among maps in the same layer with arrow buttons. The center button displays the entire maps in the layer on a screen.	
	Move up / down among layers	
	Move up / down among linked maps	
	Launches 'Instant Viewer window	
	Launches 'Instant Player' window	
	Turns on relay output	
	Turns off relay output	
	Move down to a child map	

Note Some of the menus are supported through context menu over the video. Click the right button on the mouse to see the menu.

Caution The entire menus are not supported in every device. Some menus are not supported in certain devices.

8.2.1. Launching 'Instant Viewer' to play live video

1. Select a camera component icon on a map.
2. Click 'Instant Viewer' icon . Live video plays in a single-channel viewer window.

8.2.2. Launching 'Instant Player' to play recorded video (DVR/Network Recorder only)

1. Select a camera component icon on a map.
2. Click 'Instant Player' icon . Recorded video plays in a single-channel player window.

Note	Pre-alarm video duration is to be set [Tools] - [Options] menu.

Caution	‘Instant Player’ feature is compatible only with DVR devices. By selecting a video channel of network camera and video server, this menu is de-activated.

8.2.3. Turning on relay output

1. Select a relay component icon on a map.
2. Click relay-on icon .

8.2.4. Turning off relay output

1. Select a relay component icon on a map.
2. Click relay-off icon .

8.2.5. Moving to linked daughter-map

1. Select ‘Linkage’ button on the current map (mother-map).
2. Click ‘View linked image’ button , then the linked map (daughter-map) appears.

Chapter9. Troubleshooting

Calling for Malfunctions

If there are problems in operation, please refer to the items below. If the problem persists, please contact the agent you purchased this product from.

Problem	Solution
Nothing appears on the screen.	Please check the power connections. Please check the video signal line connection. Check if there is anything wrong with the video signals entered to the network server. Open MS-DOS window to check whether device (Network Camera, Video Server, and DVR) is connected to the network. ※ In case of ping 192.168.0.100, replace it with IP address set up at server.
The video image is not clear.	Please check if the lens is clean. Please clean the lens with a clean cloth or brush. Please make sure that the screen is not exposed directly to bright light. Please move the angle or location of the image if necessary. Please readjust the back focus of the connected camera.
The screen is dark.	Please adjust the contrast feature of the monitor. Check if the terminals are properly set between the systems. Please check if an auto iris lens is being used and adjust the brightness level.
Back stripes appear on the screen.	Dose the power supplied to the server sway away from standards or change depending oh the time?
The screen flickers too much.	Check if the connected camera faces directly into the sun or lights. Check if the cables are properly connected.
The MOTION DETECTION function is not working.	Please check if 'MOTION DETECTION' made is turned on. Please check if the MD LEVEL is too low. Please check the setting of the MD AREA.
Audio is not working	Please check the audio is selected from admin page. Please check speaker volume from the viewer. In case input sound through microphone at Viewer is not outputted through Audio Out of server, please check whether Audio Out channel is selected at admin page. Or check whether microphone is available at Viewer. Please check audio driver is working in user's PC.
Video is stopped	Please check whether network cable of device is correctly connected. In case user uses hub or IP router, check whether these network equipments are working properly. Open MS-DOS window and check whether device is connected to the network.
No network connection	Please check MAC address and IP address of device. Check whether network cable is properly connected (Note: User ping command) Check whether connecting to Admin page is available.
When camera cannot be controlled for Pan/ Tilt/ Zoom	Check the camera / speed done protocol. See if the proper model and manufacturer is selected at the mode. Inspect the cables connected to the device.
When program or drive is not installed	Check if the OS is installed properly. Windows 2000 (SP 4) or Windows XP Professional (SP 2) is recommended. When installing USB dongle key drive, check if the dongle key is removed. After installing the drive, USB dongle key should be attached.

Problem	Solution
Program does not run	Check if the PC (or server) runs other application programs. By running multiple programs on the same a PC (or server), they may affect PC performance. It is recommended to close all other application programs and run SNM-64S/P only. Check if USB dongle key is attached to the PC when you are running SNM-64P.
Previous settings disappear when re-install the program	Confirm if the DB files are overwritten during the installation process. If overwrite option is selected during the process, it is necessary to recover the original DB files. ※ In the SNM-64S/P folder, there are MSetup(old)~.mdb files. Remove '(old)' out of the name, and the previous settings are recovered.
'Site Tree' does not display camera list after registering a device	Check if the camera is selected in 'Device Manager' after registering login information. It is necessary to compose the site tree after registering device. Only the selected camera(s) in the 'Site Manager' appear under site tree when the program runs. Check if you logged in the program with other user ID. SNM-64S/P brings up the corresponding settings for each user.
'Instant Player' button is not activated or does not function	Check if the selected event or alarm is from DVR. 'Instant Player' is compatible with DVR/Network Recorder only, and it is not supported with network camera or video server.
Camera OSD button does not function	Camera can be controlled only when connected to the RS-485's configuration communication terminal.
'Original Size' button is not activated	'Original Size' menu is available only in single-channel mode.
Device is not listed in the search list during device registration	Check if the device is powered properly. Open MS-DOS window to check whether device is connected to the network. Check if you run 'SNM-64S' and 'SNM-64P' at the same time. If so, a device responds to a program that runs earlier.
'Record' button is not activated	Check if you selected a video screen from DVR. Record menu is compatible with network camera and video server and is not compatible with DVR.
Programmed 'Action' does not perform against alarm	Check the time schedule of the alarm processing. Alarm is processed only for the scheduled time and the same signal is disregarded for the other time. Check the time schedule of the action. Action does perform only for the scheduled time. Check if 'For video-displayed devices mode' in 'Event Reception' menu. Under 'For video-displayed devices' mode, actions cannot perform even during the scheduled time. Only the logs are displayed in the list pane.
Image transferred to FTP or by E-mail cannot be viewed	Check if an image is captured properly with 'Snapshot' menu. Check if the stored snapshot image is proper or not. The snapshot image is firstly archived and then transmitted to FTP server or e-mailed.

SNM-64S/P Specifications

Item			SNM-64S	SNM-64P
Device to use	Type of device		Network Camera, Video Server, DVR, Network Recorder	
	Number of devices to register to the program		No limit	
	Supported devices		SNC-550, SNP-3300/1000 SNS-100/400 SVR-1630, SVR-1650/1640/950, SVR-940/450 SNR-32A/16A/9A	
User Account	User Group		2	No limit
	User		2	No limit
Live monitoring	Primary and secondary video monitoring screen		Supported	
	Screen-split modes		1 ~ 64	
	Full-screen mode		Supported	
	Control menu	Launches Instant Player window manually (DVR/Network Recorder only)	Supported	
		Controls PTZ function (Pan, Tilt, Zoom, Focus, Preset)	Supported	
		Sends out e-Mail	-	Supported
		Transmits image files to a FTP server	-	Supported
		Takes snapshot / Prints image	Supported	
Playback	Remote playback		Supported	
	Remote backup		Supported	
	Local playback		Supported	
	Converts video file format to AVI		Supported	
	Search	Go to a certain time	Supported	
		Latest data search	Supported	
		Timeline index search	Supported	
	Control menu	Zooms in/out on the recorded image	Supported	
		Sends out e-Mail	-	Supported
		Transmits image files to a FTP server	-	Supported
		Takes snapshot / Prints image	Supported	

Event signal monitoring	Display current event log on the list		Supported	
	Changes border of live video channel to red		Supported	
	Control menu	Filters out unnecessary signal	Supported	
		Launches Instant Viewer window manually	Supported	
		Launches Instant Player window manually	Supported	
Alarm signal monitoring	Specifies a certain types of alarms to monitor		-	Supported
	Specifies a certain period of time of a day to monitor alarms		-	Supported
	Defines automated notifications to user		-	Supported
	Defines actions against alarms		-	Supported
	Schedules actions against alarms		-	Supported
	Alarm notification & Actions	Displays current alarm log on the list	-	Supported
		Plays warning sound or message automatically	-	Supported
		Displays thumbnail image automatically	-	Supported
		Launches Instant Viewer window automatically	-	Supported
		Launches Instant Player window automatically	-	Supported
		Controls preset on PTZ camera	-	Supported
		Sends out e-Mail	-	Supported
		Transmits image files to a FTP server	-	Supported
	Library	Creates time schedules to use	-	Supported
		Registers e-Mail accounts to use	-	Supported
		Registers FTP servers to use	-	Supported
Alarm Control Station	Provides integrated window of easy to use		-	Supported
	Verification	Launches Instant Viewer window manually	-	Supported
		Launches Instant Player window manually	-	Supported
	Actions	Sends out e-Mail	-	Supported
		Transmits image files to a FTP server	-	Supported
	Confirmation	Marks an alarm as confirmed	-	Supported
		Provides space to write comments	-	Supported
Event monitoring on a map	Interactive communication among maps in different layers		Supported	
	Composition	Number of map group(s)	1	No limit
		Number of layers per map group	1	16
		Number of maps per layer	64	64
	Supports JPEG image		Supported	

※ The entire items are not supported in every device. Some items are not supported in certain devices.

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• SALES NETWORK

SAMSUNG TECHWIN CO., LTD.
333-1, Sangdaewon 1-dong, Jungwon-gu, Seongnam-si, Gyeonggi-do 462-807, Korea
TEL : +82-31-730-8931~3 FAX : +82-31-730-8950

SAMSUNG OPTO-ELECTRONICS UK, LTD.
Samsung House, 1000 Hillswood Drive, Hillswood Business Park Chertsey, Surrey KT16 OPS
TEL : +44-1932-45-5308 FAX : +44-1932-45-5325

www.samsungtechwin.com
www.samsungcctv.com

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